

1972  
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# 1972 CENSUS OF MANUFACTURES

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ed December 1973

U. S. DEPARTMENT OF COMMERCE • Social and Economic Statistics Administration • BUREAU OF THE CENSUS

## General Statistics for Geographic Divisions and States

This report presents advance results from the 1972 Census of Manufactures for geographic divisions and States. The data are based on the sample for the Annual Survey of Manufactures which was conducted as an integral part of the census of manufactures. During all phases of the processing of the census, the establishments comprising the Annual Survey sample were separately identified and processed.

The tables in this advance report provide data on employment, man-hours, payrolls, value added by manufacture, cost of materials, value of shipments, and capital expend-

itures for manufacturing industries. Establishments are classified in manufacturing industries in accordance with industry definitions described in the 1967 edition of the Standard Industrial Classification Manual.

The subsequent preliminary reports of the 1972 Census of Manufactures for individual States will be based on data from the census of manufactures universe and will provide data by industry groups for the State and large standard metropolitan statistical areas and "manufacturing" totals for counties. General statistics for the States,

(Continued on page 4)

Table 1. General Statistics for the United States: 1958 to 1972

(See appendix, Explanation of Terms)

Year	All employees <sup>1</sup>		Production workers			Value added by manufacture (million dollars)	Cost of materials (million dollars)	Value of shipments (million dollars)	Capital expenditures, new (million dollars)	End-of-year inventories (million dollars)
	Number	Payroll	Number	Man-hours	Wages					
	(1,000)	(million dollars)	(1,000)	(millions)	(million dollars)					
1972 Census <sup>2</sup> .....	18,648	171,080	13,200	26,155	103,296	348,048	401,279	745,301	23,931	*108,259
1971 ASM <sup>2</sup> .....	18,363	156,203	12,875	25,266	93,231	314,152	356,017	670,971	20,947	*101,862
1970 ASM <sup>2</sup> .....	19,217	153,079	13,528	26,673	91,609	300,228	336,552	634,322	22,164	101,284
1969 ASM <sup>2</sup> .....	20,036	152,766	14,358	28,600	93,460	304,441	341,725	642,636	22,291	98,206
1968 ASM <sup>2</sup> .....	19,528	141,823	14,041	28,157	87,480	285,059	320,698	603,220	20,613	90,505
1967 Census.....	19,323	132,208	13,955	27,838	81,394	261,984	298,514	597,398	21,503	84,406
1966 ASM <sup>2</sup> .....	19,028	125,350	13,826	28,102	78,256	250,486	293,664	538,737	20,236	77,721
1965 ASM <sup>2</sup> .....	18,012	113,986	13,076	26,568	71,361	226,940	268,386	492,006	16,615	68,009
1964 ASM <sup>2</sup> .....	17,268	106,048	12,403	25,245	65,839	206,194	244,080	447,985	13,262	63,211
1963 Census.....	16,967	99,904	12,232	24,509	62,094	192,102	229,684	420,528	11,371	59,913
1958 Census.....	16,025	78,326	11,666	22,672	49,575	141,500	(NA)	(NA)	9,544	49,947

Note: The difference between value of shipments and payroll includes, in addition to profits, the cost of all materials used, supplements to wages, depreciation, interest, and rent, as well as purchased services such as advertising, legal, accounting, maintenance and repair, and taxes.

(NA) Not available. \* Revised.

<sup>1</sup>Includes employment and payroll at central administrative offices and auxiliary units. (For a more complete explanation, see appendix.)

<sup>2</sup>The data are estimates derived from a representative sample of manufacturing establishments canvassed in the Annual Survey of Manufactures (ASM).



Table 2. General Statistics Estimates for Divisions and States: 1972, 1971, and 1967

(See appendix, Explanation of Terms)

Divisions and States	1972										Standard error of estimate <sup>2</sup> (percent) for columns—		
	All employees <sup>1</sup>		Production workers			Value added by manufacture	Cost of materials	Value of shipments	Capital expenditures, new	End-of-year inventories			
	Number	Payroll	Number	Man-hours	Wages								
	(1,000)	(million dollars)	(1,000)	(millions)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	A	F	I
UNITED STATES, TOTAL <sup>3</sup> .....	18,648	171,080	13,200	26,155	103,296	348,048	401,279	745,301	23,931	108,259	1	1	1
New England.....	1,322	11,484	909	1,794	6,492	21,810	17,955	39,602	1,211	6,630	1	1	2
Maine.....	98	670	80	159	495	1,331	1,411	2,739	131	359	3	1	3
New Hampshire.....	87	651	65	128	408	1,265	1,022	2,266	97	339	3	3	7
Vermont.....	38	314	27	55	178	653	607	1,284	37	206	5	3	7
Massachusetts.....	596	5,259	398	778	2,866	10,312	8,150	18,313	506	2,896	1	1	3
Rhode Island.....	116	847	90	170	547	1,723	1,426	3,143	103	487	2	3	4
Connecticut.....	387	3,743	249	504	1,998	6,526	5,339	11,857	337	2,343	1	1	4
Middle Atlantic.....	3,857	35,857	2,556	4,971	20,103	70,063	67,908	137,472	4,270	20,609	1	1	1
New York.....	1,662	15,626	1,048	2,024	8,076	30,691	27,651	57,944	1,670	8,512	1	1	2
New Jersey.....	790	7,770	510	1,014	4,134	15,727	15,304	30,907	1,004	4,393	1	1	4
Pennsylvania.....	1,405	12,461	998	1,933	7,893	23,645	24,953	48,621	1,596	7,704	1	1	1
East North Central.....	4,893	51,854	3,472	6,956	31,972	99,055	114,762	212,197	5,952	27,934	1	1	1
Ohio.....	1,327	13,261	925	1,866	8,670	27,129	28,783	55,274	1,597	7,919	1	1	1
Indiana.....	693	6,779	518	1,027	4,578	13,723	15,356	28,911	894	4,402	1	1	3
Illinois.....	1,307	12,457	893	1,778	7,662	25,582	27,993	53,017	1,550	7,725	1	1	1
Michigan.....	1,069	12,735	776	1,566	8,012	23,264	30,735	53,873	1,366	4,993	1	1	2
Wisconsin.....	497	6,622	360	719	3,050	9,357	11,895	21,122	545	2,895	1	1	3
West North Central.....	1,196	10,905	832	1,638	6,507	23,802	37,153	60,195	1,631	6,908	1	1	1
Minnesota.....	276	2,726	177	348	1,368	5,107	7,991	12,714	393	1,566	3	1	3
Iowa.....	220	2,047	160	316	1,357	4,851	7,987	12,741	413	1,450	2	1	1
Missouri.....	450	4,008	311	606	2,380	8,591	11,090	19,508	450	2,437	1	1	3
North Dakota.....	*11	*81	*8	*15	*51	*207	*381	*593	*21	*68	16	16	31
South Dakota.....	17	138	13	27	94	288	678	960	*29	62	4	4	19
Nebraska.....	86	726	63	129	479	1,828	4,266	6,043	109	506	4	2	5
Kansas.....	136	1,179	100	197	778	2,930	4,760	7,636	216	819	2	2	4
South Atlantic.....	2,669	20,099	2,043	4,103	13,026	43,276	51,887	94,912	3,862	13,634	1	1	1
Delaware.....	69	763	37	73	301	1,318	2,134	3,431	90	347	2	1	3
Maryland.....	248	2,300	171	338	1,378	4,659	5,126	9,757	282	1,319	1	1	2
District of Columbia.....	22	243	11	21	113	420	270	688	23	49	3	3	6
Virginia.....	365	2,753	283	559	1,832	5,987	6,591	12,524	578	2,609	1	1	2
West Virginia.....	115	1,053	89	176	749	2,585	2,330	4,902	219	668	2	1	3
North Carolina.....	747	4,955	602	1,219	3,396	10,778	13,100	23,798	992	3,790	1	1	2
South Carolina.....	334	2,268	274	563	1,628	4,860	5,591	10,409	475	1,368	1	1	8
Georgia.....	445	3,181	349	703	2,138	7,119	10,727	17,809	677	2,061	1	1	2
Florida.....	324	2,583	227	451	1,491	5,550	6,018	11,594	526	1,423	2	2	3
East South Central.....	1,250	9,107	996	1,973	6,376	19,829	25,292	45,642	1,544	7,290	1	1	2
Kentucky.....	268	2,196	207	407	1,512	5,564	6,817	12,240	394	2,125	2	1	8
Tennessee.....	464	3,331	364	721	2,275	6,668	8,721	16,174	526	2,327	1	2	1
Alabama.....	320	2,282	262	518	1,648	4,834	6,107	10,866	392	1,416	2	1	2
Mississippi.....	198	1,298	163	327	941	2,763	3,647	6,362	232	1,422	1	1	4
West South Central.....	1,175	9,806	843	1,696	5,981	23,995	34,251	58,211	2,271	7,305	1	1	1
Arkansas.....	180	1,147	148	296	844	2,916	3,788	6,678	186	947	2	1	4
Louisiana.....	161	1,469	118	250	974	4,032	6,674	10,699	561	950	2	1	2
Oklahoma.....	139	1,158	92	182	634	2,206	2,991	5,145	231	743	3	1	5
Texas.....	695	6,032	485	968	3,529	14,841	20,798	35,689	1,293	4,665	1	1	1
Mountain.....	362	3,224	252	494	1,963	6,939	9,987	16,810	783	2,063	1	1	2
Montana.....	21	184	16	33	136	424	1,079	1,508	80	155	5	2	4
Idaho.....	41	308	33	64	222	728	1,131	1,849	67	239	4	3	3
Wyoming.....	*7	*58	*6	*11	*42	*147	*276	*420	*22	*48	18	16	12
Colorado.....	121	1,182	83	164	709	2,361	3,139	5,486	246	621	3	3	3
New Mexico.....	24	161	17	34	100	343	557	886	*29	92	6	7	24
Arizona.....	88	812	57	111	452	1,812	2,119	3,861	226	564	2	1	2
Utah.....	51	438	34	65	253	936	1,487	2,423	86	290	3	2	6
Nevada.....	9	81	6	12	49	188	199	377	27	54	6	5	14
Pacific.....	1,923	18,750	1,296	2,529	10,874	39,270	42,079	80,252	2,406	15,883	1	1	2
Washington.....	218	2,225	151	290	1,323	4,484	5,672	10,369	343	2,741	2	2	5
Oregon.....	173	1,570	137	263	1,136	3,271	4,026	7,280	298	870	2	2	4
California.....	1,501	14,686	985	1,932	8,245	30,864	31,661	61,218	1,684	12,122	1	1	2
Alaska.....	7	79	6	11	59	201	227	443	26	56	7	8	11
Hawaii.....	24	190	17	33	111	450	493	942	*55	94	4	3	16

Note: The difference between value of shipments and payroll includes, in addition to profits, the cost of all materials used, supplements to wages, depreciation, interest, and rent, as well as purchased services such as advertising, legal, accounting, maintenance and repair, and taxes.

The figures shown with an asterisk (\*) either have associated standard errors exceeding 15 percent or are not consistent with other census series and related data. Revised.

<sup>1</sup>Includes employment and payroll reported at central administrative offices and auxiliary units.

<sup>2</sup>A description of the standard error of estimate is given in the introduction to the 1971 Annual Survey of Manufactures, "General Statis-

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Table 2. General Statistics Estimates for Divisions and States: 1972, 1971, and 1967—Continued

(See appendix, Explanation of Terms)

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Divisions and States	1971										1967	
	All employees <sup>1</sup>		Production workers			Value added by manufacture	Cost of materials	Value of shipments	Capital expenditures, new	End-of-year inventories	All employees	Value added by manufacture
	Number	Payroll	Number	Man-hours	Wages							
	(1,000)	(million dollars)	(1,000)	(millions)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(1,000)	(million dollars)
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)
UNITED STATES, TOTAL <sup>3</sup> .....	18,363	156,203	12,875	25,266	93,231	314,152	356,017	670,971	20,947	101,862	19,323	261,984
New England.....	1,349	10,968	917	1,788	6,157	19,872	16,824	36,801	1,109	6,471	1,562	18,972
Maine.....	95	616	79	152	449	1,208	1,303	2,495	121	352	111	1,070
New Hampshire.....	82	576	60	117	356	1,089	926	2,021	80	300	95	932
Vermont.....	37	296	26	52	161	562	540	1,102	50	225	43	515
Massachusetts.....	617	5,109	408	784	2,755	9,495	7,572	17,110	454	2,776	714	8,715
Rhode Island.....	111	758	85	163	487	1,469	1,248	2,715	80	432	122	1,351
Connecticut.....	407	3,613	261	521	1,949	6,049	5,233	11,358	325	2,386	478	6,390
Middle Atlantic.....	3,925	34,346	2,607	5,032	18,720	65,220	63,241	128,594	3,718	20,148	4,361	57,262
New York.....	1,702	15,263	1,076	2,066	7,648	28,862	25,961	54,937	1,432	8,477	1,929	25,247
New Jersey.....	797	7,258	517	1,024	3,881	14,394	14,540	28,953	798	4,258	881	12,738
Pennsylvania.....	1,426	11,825	1,014	1,942	7,191	21,964	22,740	44,704	1,488	7,413	1,550	19,277
East North Central.....	4,793	45,573	3,355	6,619	28,277	87,602	101,441	189,465	5,242	26,148	5,151	75,016
Ohio.....	1,332	12,513	922	1,819	7,796	23,992	25,921	50,142	1,310	7,425	1,397	20,435
Indiana.....	665	6,003	491	957	3,958	12,074	13,281	25,346	847	3,988	710	10,308
Illinois.....	1,282	11,702	871	1,709	6,876	22,790	25,109	47,940	1,476	7,313	1,397	20,017
Michigan.....	1,034	11,129	729	1,464	6,965	20,271	26,787	47,207	1,202	4,705	1,134	17,242
Wisconsin.....	480	4,227	342	670	2,682	8,476	10,343	18,830	406	2,717	512	7,014
West North Central.....	1,145	9,697	783	1,528	5,811	20,863	30,565	51,261	1,141	6,262	1,206	16,773
Minnesota.....	278	2,468	177	347	1,352	4,827	6,455	11,222	271	1,507	300	4,080
Iowa.....	201	1,729	143	280	1,122	3,941	6,317	10,229	263	1,311	210	3,251
Missouri.....	437	3,673	296	570	2,135	7,525	9,700	17,198	363	2,190	452	5,895
North Dakota.....	10	70	7	15	43	189	350	336	11	62	8	113
South Dakota.....	16	119	11	23	78	226	517	741	14	49	16	171
Nebraska.....	80	618	59	119	411	1,594	3,235	4,827	87	428	77	1,150
Kansas.....	124	1,019	90	176	669	2,561	3,993	6,507	133	715	144	2,112
South Atlantic.....	2,580	18,041	1,963	3,891	11,615	38,915	45,410	84,786	3,330	12,620	2,502	29,313
Delaware.....	70	735	35	72	282	1,281	1,952	3,222	78	306	70	958
Maryland.....	254	2,184	176	347	1,311	4,279	4,812	9,113	312	1,300	288	3,781
District of Columbia.....	22	215	10	18	96	380	270	648	28	53	23	333
Virginia.....	351	2,448	270	528	1,610	5,173	5,738	10,950	435	2,220	340	4,068
West Virginia.....	118	1,018	89	175	701	2,388	2,189	4,562	241	687	124	2,170
North Carolina.....	699	4,267	566	1,119	2,950	9,824	11,104	20,881	810	3,477	643	6,606
South Carolina.....	324	2,027	265	536	1,449	4,235	4,801	9,011	499	1,310	304	3,030
Georgia.....	434	2,866	340	675	1,920	6,533	9,372	16,396	508	1,979	423	4,684
Florida.....	309	2,282	212	422	1,296	4,822	5,172	10,005	417	1,288	285	3,683
East South Central.....	1,168	7,921	927	1,814	5,527	18,665	21,106	39,644	1,358	6,085	1,092	13,718
Kentucky.....	243	1,855	187	358	1,247	5,168	5,601	10,732	284	1,762	225	3,636
Tennessee.....	444	2,955	347	680	2,007	6,729	7,410	14,079	530	2,166	418	4,921
Alabama.....	299	2,040	243	480	1,486	4,531	5,041	9,561	356	1,357	289	3,526
Mississippi.....	182	1,070	150	296	788	2,237	3,054	5,272	189	800	160	1,635
West South Central.....	1,152	9,041	822	1,644	5,481	21,553	31,111	52,548	2,373	7,083	1,083	16,616
Arkansas.....	165	980	135	269	715	2,420	3,262	5,626	172	841	144	1,558
Louisiana.....	161	1,347	119	247	898	3,505	5,841	9,334	537	931	165	2,790
Oklahoma.....	132	1,024	88	174	567	1,834	2,719	4,554	158	636	118	1,346
Texas.....	694	5,690	480	956	3,301	13,794	19,290	33,034	1,506	4,675	658	10,922
Mountain.....	349	2,916	240	469	1,751	5,875	8,543	14,467	629	1,936	315	4,522
Montana.....	20	159	15	31	119	330	882	1,232	50	159	20	312
Idaho.....	44	316	33	64	209	669	1,002	1,662	54	235	37	503
Wyoming.....	6	51	5	10	38	119	244	363	6	42	6	86
Colorado.....	117	1,072	78	155	646	2,089	2,591	4,699	238	615	104	1,509
New Mexico.....	23	142	17	33	89	273	497	766	44	78	17	205
Arizona.....	83	721	52	102	387	1,385	1,776	3,181	142	484	77	995
Utah.....	50	391	34	63	223	864	1,388	2,258	72	278	47	778
Nevada.....	8	65	5	11	40	146	163	307	22	45	7	139
Pacific.....	1,870	17,525	1,241	2,419	9,765	35,125	37,196	72,126	2,060	14,925	2,050	29,675
Washington.....	221	2,062	148	277	1,206	4,117	5,561	10,731	365	2,920	271	3,764
Oregon.....	169	1,407	132	253	1,012	2,807	3,390	6,183	232	839	163	2,061
California.....	1,447	13,799	937	1,844	7,382	27,568	27,542	54,440	1,417	11,007	1,584	23,394
Alaska.....	8	80	6	12	59	198	238	430	19	67	8	130
Hawaii.....	24	177	18	34	106	435	466	900	28	92	25	326

tics for Industry Groups and Industries," M71(AS)-1. The percentage standard errors shown for columns A, F, and I are the approximate relative standard errors of the estimate of level. The standard errors for 1971 are shown in the "Statistics for States, Standard Metropolitan Statistical Areas, Large Industrial Counties, and Selected Cities," M71(AS)-6.1-6.9.

<sup>3</sup>The totals at the U.S. level were derived from separate tabulations based on industry rather than State detail, and have been published previously in the 1972 Census of Manufactures Advance Report, "General Statistics for Industry Groups and Industries," MC72(A)-1. The sum of the State detail may not add to the U.S. total because of (1) independent rounding and (2) independent review and correction to the industry tabulations.



based on both the Census and the Annual Survey of Manufactures, will be shown for 1972.

The figures shown in this report should be regarded as approximations of the final census figures because (1) the estimates are subject to sampling errors, and (2) the data have been subjected only to a preliminary review. No adjustments in the dollar figures have been made for changes in prices or wage levels from the comparison years of 1967 and 1971 to 1972.

The estimates for 1972 are based on reports from about 65,000 manufacturing establishments selected in a probability sample out of a total of 310,000 manufacturing establishments. Included in the sample are all large manufacturing establishments, which account for more than two-thirds of total employment of all manufacturing establishments in the United States. The sample also includes varying proportions of the more numerous medium and small-sized establishments. The estimates obtained from this sample may vary from the totals that are obtained from a complete canvass of all manufacturing establishments. Most of the Annual Survey of Manufactures estimates are computed by the difference method. Using the difference method, the amount of change from the previous census of manufactures year to the current year forms the basis for estimation.

The sampling errors--the difference between the estimates obtained and the results obtainable from a comparable complete-coverage survey--are unknown. Guides to the potential sizes of the sampling errors, however, are provided by the standard errors of the estimates.

Estimates of the standard errors have been computed from the sample data for selected statistics in this report. They are presented in the form of relative standard errors; the standard errors divided by the estimated values to which they refer. For a complete description of the Annual Survey of Manufactures and the sampling procedure used, see the introduction to the Annual Survey of Manufactures, 1971.

The census of manufactures is the 29th such census for the United States since the first census was conducted in 1809. Since World War II, it has been scheduled as a 5-year program. For a variety of reasons, however, the actual censuses were conducted for 1947, 1954, 1958, 1963, and 1967. In recent years, the census of manufactures has been conducted as part of the Economic Census Program which also includes censuses of mineral industries, construction, retail and wholesale trade, service industries, and transportation.

An explanation of the data items included in this report appears in the appendix.



## Appendix. EXPLANATION OF TERMS

**All Employees**—The category "all employees" comprises all full-time and part-time employees on the payrolls of operating manufacturing establishments who worked or received pay for any part of the pay period including the 12th of the months specified on the report form. Included are all persons on paid sick leave, paid holidays, and paid vacations during these pay periods. Excluded are members of the Armed Forces and pensioners carried on the active rolls but not working during the period. Officers of corporations are included as employees; proprietors and partners of unincorporated firms, however, are excluded from the total.

**Production and Related Workers**—Workers (up through the working foreman level) engaged in fabricating, processing, assembling, inspection, receiving, storage, handling, packing, warehousing, shipping (but not delivering), maintenance, repair, janitorial, and watchman services, product development, auxiliary production for plants own use (e.g. power plant), recordkeeping, and other services closely associated with these production operations at the establishment covered by the report are included. Supervisory employees above the working foreman level are excluded from the category.

**All Other Employees**—Represents nonproduction personnel of the manufacturing establishment, including those engaged in the following activities: Factory supervision above the working foreman level, sales (including driver salesmen), sales delivery (highway truck drivers and their helpers), advertising, credit, collection, installation and servicing of own products, clerical and routine office functions, executive, purchasing, financing, legal, personnel (including cafeteria, medical, etc.) professional, and technical. Also included are employees on the payroll of the manufacturing establishment engaged in the construction of major additions or alterations to the plant and who are utilized as a separate work force.

**Central Administrative Office and Auxiliary Unit Employees**—Respondents were asked to file separate reports for any central administrative offices or auxiliary units at a different location from the establishments served or at the same location as one of these establishments but not operated as an integral part thereof and administering and serving two or more

establishments. The functions of employees in central administrative offices include general company policy determination, planning, and management (i.e. company purchasing, accounting, general engineering, direction of company personnel matters, and legal and patent matters). Auxiliaries are storage facilities, garages, repair shops, purchasing offices, sales promotion offices, and research laboratories serving the plants or central management of the company.

The employment and payroll data shown for central administrative offices and auxiliary units represent the total for all such units which primarily serve manufacturing plants.

**Average Employment**—The Annual Survey of Manufactures report forms requested employment figures for "production and related workers" for four selected pay periods (i.e. production workers during pay periods including the 12th of March, May, August, and November). For "all other employees", only a March 12th figure was requested. Thus, the "annual average" is composed of an average of the four monthly figures for the "production workers" plus this March figure for "all other employees."

**Payroll**—This total includes the gross earnings paid in the calendar year to all employees on the payroll of operating manufacturing establishments. Respondents were told they could follow the definition of payrolls used for calculating the Federal withholding tax. It includes all forms of compensation such as salaries, wages, commissions, dismissal pay, all bonuses, vacation and sick-leave pay, and compensation in kind, prior to such deductions as employees Social Security contributions, withholding taxes, group insurance, union dues, and savings bonds. The total includes salaries of officers of these establishments, if a corporation; it excludes payments to the proprietor or partners, if an unincorporated concern. Also excluded are payments to members of Armed Forces and pensioners carried on the active payrolls of manufacturing establishments.

**Production and Related Worker Man-Hours**—This total consists of all plant man-hours of production and related workers as defined above. It represents all man-hours worked or paid for at the plant including actual overtime hours (not straight-time equivalent hours). It excludes hours paid for vacations, holidays,



or sick leave when the employee was not at the plant. Where employees elected to work during the vacation period, only actual hours worked by such employees were reported.

**Value Added by Manufacture**—Value added by manufacture is derived by subtracting the total cost of materials (including material, supplies, fuel, electric energy, cost of resales, and miscellaneous receipts) from the value of shipments (including resales) and other receipts and adjusting the resulting amount by the net change in finished products and work-in-process inventories between the beginning and end of the year.

Value added avoids the duplication in the value-of-shipments figure which results from the use of products of some establishments as materials by others. Consequently, it is considered to be the best value measure available for comparing the relative economic importance of manufacturing among industries and geographic areas.

**Cost of Materials**—The term “cost of materials” refers to direct charges actually paid or payable for items consumed or put into production during the year, including freight charges and other direct charges incurred by the establishment in acquiring these materials. Manufacturers included the cost of materials or fuel consumed regardless of whether these items were purchased by the individual establishment from other companies, transferred to it from other establishments of the same company, or withdrawn from inventory during the year.

To arrive at the industry total cost of materials, separate figures were obtained for (a) the total delivered cost of all raw materials, semifinished goods, parts, components, containers, scrap, and supplies put into production or used as operating supplies and for repair and maintenance during that year; (b) the amount paid for electric energy purchased; (c) the amount paid for all fuel consumed for heat, power, or the generation of electricity; (d) the cost of work done by others on parts furnished by manufacturing establishments (contract work); (e) cost of products bought and resold in the same condition. The total excludes the cost of services used, such as advertising, insurance, telephone, etc., and research, developmental, and consulting services of other establishments; it also excludes overhead cost, such as depreciation charges, rent, interest, royalties, etc.; and it excludes materials, machinery, and equipment used in plant expansion or capitalized repairs which are chargeable to fixed-asset accounts.

**Value of Shipments**—The amounts under value of shipments are the received or receivable net selling values, f.o.b. plant, after discounts and allowances, and excluding freight charges and excise taxes. However, where the products of an industry are customarily delivered by the manufacturing establishments (baby products, fluid milk, and soft drinks, for example) the value of shipments is based on the delivered price of the goods rather than the f.o.b. plant price.

Under the general heading of shipments, manufacturers were asked to include all items made by or for each establishment from materials owned by it, whether sold, transferred to other plants of the same company, or shipped on consignment. Also included were receipts for contract work and for such miscellaneous activities as sale of scrap and refuse, installation work by manufacturing plant and employees, research and development work, and repair work. The net selling value of products made in one plant on a contract basis from materials owned by others was reported by the plant providing the materials. The value of products bought and resold without further processing (merchandising) was reported separately and is included in the value of shipments totals for each industry. The inclusion of resales in total value of shipments is a change in procedure initiated with the 1958 Census of Manufactures.

In the case of multiunit companies, the manufacturer was requested to report the value of products transferred to other establishments of the same company (i.e., other manufacturing plants, separate sales branches, or retail stores) as though the establishments were a separate economic unit. The company was requested to include in “value of interplant transfers within the company” not only the direct cost of production but also a reasonable proportion of “all other costs” (including company overhead) and profit.

For a relatively few industries, (canning and preserving, other than meats and apparel) where shipment figures are generally not maintained, the “value of production” was requested. These instances are noted in the tables for the industries involved.

**Duplication in Cost of Materials and Value of Products**—The aggregate of the cost of materials and value of shipments figures for industry groups and for all manufacturing industries includes large amounts of duplication since the products of some industries are used as materials by others. With some important exceptions, such as motor vehicles and parts, this duplication is not significant within the individual industries but arises from the addition of related industries representing successive stages in the production of a finished manufactured product. Examples are the addition of flour mills to bakeries in the food group and the addition of pulp mills to paper mills in

the paper and allied products group of industries. Estimates to the overall extent of this duplication indicate that the value of manufactured products exclusive of such duplication—the value of finished manufactures—tends to approximate two-thirds of the value of products reported in the annual survey.

In the past, the Bureau of the Census has not published figures for cost of materials or value of shipments if they contained significant duplication, even if they could be derived at the industry group level by adding the 4-digit industry detail. Effective with the 1962 Annual Survey of Manufactures, these figures were shown at all industry levels for the United States to meet the request for their use in studies in which the presence of an intermediate amount of duplication is not a limiting factor. However, they are appropriately footnoted. Effective with the 1964 Annual Survey of Manufactures, these industry-group totals are also shown at the State, standard metropolitan statistical area, and large county level.

Even where no significant amount of duplication is involved, value-of-shipments figures are deficient as measures of the relative economic importance of individual manufacturing industries or geographic areas because of the wide variation in ratio of materials, labor, and other processing cost to value of shipments, both among industries and within the same industry.

**Expenditures for Plant and Equipment**—For establishments in operation and establishments under construction but not yet in operation, manufacturers were asked to report capital expenditures for (a) permanent additions and major alterations to manufacturing establishments and (b) new machinery and equipment used for replacement purposes and additions to plant capacity if they are the type for which depreciation accounts are ordinarily maintained.

These totals exclude that portion of expenditures for new facilities and equipment leased from nonmanufacturing concerns, new facilities owned by the Federal Government but operated under contract by private companies, and plant and equipment furnished to the manufacturers by communities and organizations. Expenditures for used plant and equipment, expenditures for land, and cost of maintenance and repairs charged as current operating expense are also omitted.

**End-of-Year Inventories**—Respondents were asked to report their inventories at approximate current cost if feasible; otherwise "at book values." Since different methods of inventory valuation are used (LIFO, FIFO, etc.), the definition of the value-of-inventories aggregate for all establishments in an industry is not precise. The figures on change in inventory between years are of considerably greater importance.



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PRELIMINARY REPORT  
**1972 CENSUS OF  
MANUFACTURES**  
SUMMARY SERIES

MC72(P)-2 U. S. DEPARTMENT OF COMMERCE • Social and Economic Statistics Administration • BUREAU OF THE CENSUS

ued May 1974

**General Statistics for Geographic Divisions and States**  
(Recapitulation of Preliminary State Reports)

This report presents a summary of the 1972 Census of Manufactures preliminary State totals which were previously published in the separate State reports MC72(P)-S1 to MC72(P)-S51.

The 1972 data are based on the census of manufactures universe. They, therefore, differ from the information published in the advance summary report, "General Statistics for Geographic Divisions and States," MC72(A)-2, issued in December 1973 which was based on information supplied by a sample of manufacturing establishments included in the annual survey of manufactures reporting panel. Also, the U.S. totals differ slightly from those published in "General Statistics for Industry Groups and Industries," MC72(P)-1, because of independent review and analysis.

The 1971 data are based on reports from about 65,000 manufacturing establishments selected in a probability sample out of a total of 310,000 manufacturing establishments. Included in the sample are all large manufacturing establishments, which account for more than two-thirds of total employment of all manufacturing establishments in the United States. The sample also includes varying proportions of the more numerous medium and small sized establishments.

The tables provide data on number of establishments, total employment and wages,

number of production workers, worker wages and man-hours, value added by manufacture, cost of materials, value of shipments, and new capital expenditures. Comparative data are provided from the 1971 Annual Survey of Manufactures and the 1967 Census of Manufactures.

The figures shown in this report have been subjected to only preliminary review and must be regarded as approximations of the final census figures. No adjustments in the dollar figures have been made for changes in price or wage levels for the comparison years of 1967 and 1971 to 1972.

The 1972 Census of Manufactures is the 29th such census for the United States since 1809 when the first census was conducted. Since World War II, this census has been scheduled at 5-year intervals. However, for a variety of reasons, the actual censuses covered the years 1947, 1954, 1958, 1963, 1967, and 1972. In recent years the census of manufactures has been conducted as part of the Economic Census Program which also includes censuses of mineral industries, construction industries, retail and wholesale trade, selected service industries, and transportation.

For an explanation of the terms used in the tables, see the appendix at the end of this report.



TABLE 1. General Statistics for the United States: 1958 to 1972

(See appendix, Explanation of Terms)

Year	Establishments		All employees		Production workers			Value added by manufacture	Cost of materials, fuels, etc.	Value of industry shipments	Capital expenditures, 1958-1972
	Total	With 20 employees or more	Number	Payroll	Number	Man-hours	Wages				
	(number)	(number)	(1,000)	(million dollars)	(1,000)	(millions)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(million dollars)
1972 Census.....	316,336	111,884	18,919	173,292	13,394	26,527	104,901	352,831	405,058	752,829	22,917
1971 ASM <sup>2</sup> .....	(NA)	(NA)	18,363	156,203	12,875	25,266	93,231	314,152	356,017	670,971	20,947
1970 ASM <sup>2</sup> .....	(NA)	(NA)	19,217	153,079	13,528	26,673	91,609	300,228	336,552	634,322	22,164
1969 ASM <sup>2</sup> .....	(NA)	(NA)	20,036	152,766	14,358	28,600	93,460	304,441	341,725	642,636	22,291
1968 ASM <sup>2</sup> .....	(NA)	(NA)	19,528	141,823	14,041	28,157	87,480	285,059	320,698	603,220	20,613
1967 Census.....	305,680	107,138	19,323	132,208	13,955	27,838	81,394	261,984	298,514	597,398	21,503
1966 ASM <sup>2</sup> .....	(NA)	(NA)	19,028	125,350	13,826	28,102	78,256	250,486	293,664	538,737	20,236
1965 ASM <sup>2</sup> .....	(NA)	(NA)	18,012	113,986	13,076	26,568	71,361	226,940	268,386	492,006	16,615
1964 ASM <sup>2</sup> .....	(NA)	(NA)	17,268	106,048	12,403	25,245	65,839	206,194	244,080	447,985	13,262
1963 Census.....	306,617	99,352	16,967	99,904	12,232	24,509	62,094	192,102	229,684	420,528	11,371
1958 Census.....	299,017	95,278	16,025	78,326	11,666	22,672	49,575	141,500	(NA)	(NA)	9,544

Note: The difference between value of shipments and payroll includes, in addition to profits, the cost of all materials used, supplements to wages, depreciation, interest, and rent, as well as purchased services such as advertising, legal, accounting, maintenance and repair, and taxes.

(NA) Not available.

<sup>1</sup>Includes employment and payroll at central administrative offices and auxiliary units. (For a more complete explanation, see appendix.)

<sup>2</sup>The data are estimates derived from a representative sample of manufacturing establishments canvassed in the Annual Survey of Manufactures (ASM).

TABLE 2. General Statistics for Divisions and States: 1972, 1971, and 1967

(See appendix, Explanation of Terms)

Divisions and States	1972										
	Establishments		All employees		Production workers			Value added by manufacture	Cost of materials	Value of shipments	Capital expenditures, new
	Total	With 20 employees or more	Number	Payroll	Number	Man-hours	Wages				
	(number)	(number)	(1,000)	(million dollars)	(1,000)	(millions)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(million dollars)
UNITED STATES, TOTAL <sup>1</sup> .....	316,336	111,884	18,919.1	173,292.4	13,393.9	26,527.1	104,900.6	352,830.9	405,057.9	752,828.9	22,917.0
Northeast Region.....	95,022	35,381	5,318.7	49,087.6	3,574.7	6,947.7	27,180.7	93,358.0	87,868.6	180,219.0	5,173.9
New England Division.....	23,649	8,679	1,366.0	11,967.0	937.8	1,850.0	6,749.3	22,732.6	18,728.2	41,152.2	1,261.6
Maine.....	2,060	584	100.4	699.5	82.6	162.6	512.1	1,396.6	1,482.8	2,869.0	137.7
New Hampshire.....	1,419	557	90.4	668.1	68.3	132.6	418.2	1,297.4	1,042.7	2,314.7	104.7
Vermont.....	850	269	37.9	320.9	26.8	53.8	182.9	578.9	644.2	1,238.3	36.8
Massachusetts.....	10,703	4,119	613.4	5,445.4	410.3	802.1	2,985.7	10,721.5	8,564.5	19,139.4	534.5
Rhode Island.....	2,738	887	117.8	884.4	91.0	174.9	566.4	1,782.2	1,487.1	3,218.0	103.9
Connecticut.....	5,879	2,263	406.1	3,948.7	258.8	524.0	2,084.0	6,956.0	5,506.9	12,372.8	344.0
Middle Atlantic Division.....	71,373	26,702	3,952.7	37,120.6	2,636.9	5,097.7	20,431.4	70,625.4	69,140.4	139,066.8	3,912.3
New York.....	38,187	12,900	1,691.4	16,216.4	1,076.5	2,078.0	8,196.4	30,774.6	28,043.5	58,596.4	1,495.0
New Jersey.....	14,949	5,830	842.7	8,120.5	547.4	1,068.3	4,343.0	16,318.6	16,070.6	32,248.0	931.9
Pennsylvania.....	18,237	7,972	1,418.6	12,783.7	1,013.0	1,951.4	7,892.0	23,532.2	25,026.3	48,222.4	1,485.4
North Central Region.....	85,313	31,757	6,131.5	61,884.6	4,315.8	8,637.6	38,692.3	123,158.1	151,306.8	272,229.2	7,058.9
East North Central Division....	64,096	24,470	4,929.7	50,935.9	3,481.1	6,991.2	32,093.6	99,638.3	114,798.3	212,767.0	5,752.0
Ohio.....	16,215	6,383	1,333.9	13,632.5	933.0	1,873.9	8,655.4	26,910.6	28,392.0	54,738.0	1,579.5
Indiana.....	7,258	2,994	706.3	6,911.1	527.2	1,044.0	4,660.2	14,280.4	15,385.0	29,318.0	857.0
Illinois.....	18,481	7,282	1,310.1	12,867.3	896.8	1,776.7	7,651.0	25,759.0	28,376.3	53,698.9	1,486.9
Michigan.....	14,373	4,988	1,084.5	12,850.0	767.5	1,584.3	8,088.4	23,337.8	30,833.2	54,019.0	1,299.5
Wisconsin.....	7,769	2,823	494.9	4,675.0	356.6	712.3	3,038.6	9,350.5	11,811.8	20,993.1	529.1
West North Central Division....	21,217	7,287	1,201.8	10,948.7	834.7	1,646.4	6,598.7	23,519.8	36,508.5	59,462.2	1,306.9
Minnesota.....	5,602	1,896	300.0	2,869.2	194.6	381.0	1,546.6	5,551.4	7,454.2	12,893.3	304.1
Iowa.....	3,350	1,148	216.5	2,052.5	156.7	311.5	1,357.3	4,730.6	7,987.4	12,619.8	318.4
Missouri.....	6,680	2,454	436.2	3,920.0	300.1	585.8	2,311.6	8,178.3	10,780.5	18,754.2	348.9
North Dakota.....	477	111	9.9	76.4	6.9	14.2	47.3	207.5	376.1	589.4	13.2
South Dakota.....	601	144	17.2	133.0	12.7	24.7	88.2	272.5	650.4	916.4	20.0
Nebraska.....	1,703	588	84.8	703.3	63.0	127.5	469.1	1,737.9	4,240.6	5,923.2	104.6
Kansas.....	2,804	946	137.2	1,194.3	100.7	201.7	778.6	2,841.6	5,019.3	7,765.9	197.7
South Region.....	81,409	28,784	5,212.6	40,006.2	3,975.9	7,943.3	26,149.1	90,087.7	113,714.4	202,679.6	7,572.2
South Atlantic Division.....	41,198	14,798	2,723.0	20,451.0	2,092.6	4,193.9	13,345.7	43,918.9	52,903.4	96,324.9	3,742.5
Delaware.....	566	246	70.2	768.9	37.7	73.9	306.4	1,308.5	2,121.9	3,417.4	91.7
Maryland.....	3,544	1,414	252.2	2,347.4	174.5	344.0	1,416.8	4,686.4	5,290.5	9,938.5	273.7
District of Columbia.....	574	137	19.6	219.3	9.5	17.0	97.5	385.9	243.8	626.6	18.7
Virginia.....	4,809	1,756	376.6	2,846.7	292.3	582.5	1,901.0	6,121.8	6,728.9	12,780.9	582.6
West Virginia.....	1,728	600	118.9	1,075.7	92.1	181.3	762.2	2,632.7	2,379.4	4,995.1	215.7
North Carolina.....	8,578	3,784	750.8	5,017.4	604.4	1,214.3	3,436.0	11,023.1	13,314.5	24,161.7	989.4
South Carolina.....	3,691	1,427	344.7	2,327.0	281.7	579.9	1,666.0	4,921.0	5,737.3	10,657.8	489.2
Georgia.....	7,540	2,619	462.5	3,296.7	364.8	731.5	2,227.5	7,362.2	10,967.6	18,276.6	632.5
Florida.....	10,168	2,815	327.5	2,551.9	235.6	469.5	1,531.9	5,477.3	6,119.5	11,470.3	449.0
East South Central Division....	16,458	6,227	1,247.2	9,219.0	990.2	1,961.9	6,450.9	21,336.2	25,575.0	46,351.1	1,518.5
Kentucky.....	3,169	1,264	261.7	2,180.2	202.1	397.6	1,494.0	5,800.4	6,872.3	12,553.2	380.4
Tennessee.....	5,680	2,345	466.7	3,344.9	364.8	721.6	2,287.5	7,715.7	8,748.2	16,158.2	533.2
Alabama.....	4,929	1,591	321.2	2,394.5	260.1	516.7	1,725.3	5,048.5	6,233.8	11,194.5	374.5
Mississippi.....	2,680	1,027	197.6	1,299.4	163.2	326.0	944.1	2,771.6	3,720.7	6,445.2	230.4
West South Central Division....	23,753	7,759	1,242.4	10,336.2	893.1	1,787.5	6,352.9	24,832.6	35,236.0	60,003.6	2,311.2
Arkansas.....	2,864	1,033	180.0	1,148.0	149.0	297.0	850.5	2,767.1	3,685.1	6,400.8	216.2
Louisiana.....	3,646	1,146	181.2	1,619.7	135.0	277.6	1,081.6	4,380.7	7,077.1	11,487.2	578.1
Oklahoma.....	3,008	881	141.7	1,188.5	93.9	183.2	653.8	2,241.9	3,103.3	5,293.0	225.6
Texas.....	14,235	4,699	739.5	6,380.0	515.2	1,029.7	3,767.0	15,442.9	21,370.5	36,822.6	1,291.3
West Region.....	55,468	17,045	2,350.4	22,972.0	1,600.2	3,102.7	13,223.9	47,331.7	53,465.8	99,867.4	3,111.6
Mountain Division.....	9,999	2,789	377.9	3,342.0	265.3	518.7	2,078.7	7,315.3	10,597.5	17,760.2	736.5
Montana.....	925	199	21.1	182.0	16.7	33.2	136.8	457.5	1,122.9	1,583.6	75.4
Idaho.....	1,178	339	41.3	317.3	33.2	62.6	231.2	749.8	1,193.8	1,934.6	72.8
Wyoming.....	373	77	7.1	58.4	5.1	10.1	40.4	148.4	315.4	460.0	23.2
Colorado.....	2,807	816	125.6	1,201.9	86.5	172.4	752.6	2,455.0	3,376.7	5,803.2	230.2
New Mexico.....	914	225	23.9	162.3	17.2	33.3	98.7	366.2	569.5	920.7	30.4
Arizona.....	2,012	599	94.8	870.5	62.3	122.2	485.8	1,916.9	2,260.5	4,104.2	199.4
Utah.....	1,352	426	53.9	455.3	37.3	70.9	274.1	1,005.9	1,533.9	2,520.5	80.8
Nevada.....	438	108	10.2	94.3	7.0	14.0	59.1	215.6	224.8	433.4	24.3
Pacific Division.....	45,469	14,256	1,972.5	19,630.0	1,334.9	2,584.0	11,145.2	40,016.4	42,868.3	82,107.2	2,375.1
Washington.....	5,274	1,436	223.2	2,281.9	156.8	299.5	1,390.2	4,570.5	5,732.4	10,489.0	332.7
Oregon.....	4,618	1,431	176.2	1,599.9	140.0	269.1	1,157.1	3,471.2	4,049.1	7,553.5	276.3
California.....	34,475	11,060	1,540.3	15,474.4	1,014.1	1,969.9	8,422.3	31,382.7	32,323.4	62,707.7	1,697.2
Alaska.....	337	91	8.0	83.6	6.4	12.4	62.6	179.7	219.6	403.4	22.3
Hawaii.....	765	238	24.8	190.2	17.6	33.1	113.0	412.3	543.8	953.6	46.6

See footnotes at end of table.



TABLE 2. General Statistics for Divisions and States: 1972, 1971, and 1967—Continued

(See appendix, Explanation of Terms)

Divisions and States	1971												1967	
	All employees		Production workers			Value added by manufacture	Cost of materials	Value of shipments	Capital expenditures, new	Standard error of estimate <sup>2</sup> (percent) for columns—			All employees	Value added by manufacture
	Number	Payroll	Number	Man-hours	Wages					A	F	I		
	(1,000)	(million dollars)	(1,000)	(millions)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(million dollars)				(1,000)	(million dollars)
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)					
UNITED STATES, TOTAL <sup>1</sup> .....	18,363	156,203	12,875	25,266	93,231	314,152	356,017	670,971	20,947	1	1	1	19,323	261,984
Northeast Region.....	5,274	45,314	3,524	6,820	24,877	85,092	80,065	165,395	4,827	1	1	1	5,923	76,234
New England Division.....	1,349	10,968	917	1,788	6,157	19,872	16,824	36,801	1,109	1	1	3	1,562	18,972
Maine.....	95	616	79	152	449	1,208	1,303	2,495	121	2	2	■	111	1,070
New Hampshire.....	82	576	60	117	356	1,089	926	2,021	80	2	2	4	95	932
Vermont.....	37	296	26	52	161	562	540	1,102	50	3	3	11	43	515
Massachusetts.....	617	5,109	408	784	2,755	9,495	7,572	17,110	454	1	1	6	714	8,715
Rhode Island.....	111	758	85	163	487	1,469	1,248	2,715	80	2	3	10	122	1,351
Connecticut.....	407	3,613	261	521	1,949	6,049	5,233	11,358	325	1	1	2	478	6,390
Middle Atlantic Division.....	3,925	34,346	2,607	5,032	18,720	65,220	63,241	128,594	3,718	1	1	1	4,361	57,262
New York.....	1,702	15,263	1,076	2,066	7,648	28,862	25,961	54,937	1,432	1	1	3	1,929	25,247
New Jersey.....	797	7,258	517	1,024	3,881	14,394	14,540	28,953	798	1	1	2	881	12,738
Pennsylvania.....	1,426	11,825	1,014	1,942	7,191	21,964	22,740	44,704	1,488	1	1	2	1,550	19,277
North Central Region.....	5,939	55,270	4,138	8,147	34,088	108,465	132,006	240,525	6,383	1	1	1	6,357	91,789
East North Central Division.....	4,793	45,574	3,355	6,619	28,277	87,602	101,441	189,465	5,242	1	1	1	5,151	75,016
Ohio.....	1,332	12,513	922	1,819	7,796	23,992	25,921	50,142	1,310	1	1	1	1,397	20,435
Indiana.....	665	6,003	491	957	3,958	12,074	13,281	25,346	847	1	1	1	710	10,308
Illinois.....	1,282	11,702	871	1,709	6,876	22,790	25,109	47,940	1,476	1	1	1	1,397	20,017
Michigan.....	1,034	11,129	729	1,464	6,965	20,271	26,787	47,207	1,202	1	1	2	1,134	17,242
Wisconsin.....	480	4,227	342	670	2,682	8,476	10,343	18,830	406	1	1	2	512	7,014
West North Central Division.....	1,146	9,696	783	1,528	5,811	20,863	30,565	51,060	1,141	1	1	2	1,206	16,773
Minnesota.....	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(X)	(X)	(X)	300	4,080
Iowa.....	201	1,729	143	280	1,122	3,941	6,317	10,229	263	2	2	3	210	3,251
Missouri.....	437	3,673	296	570	2,135	7,525	9,700	17,198	363	1	1	5	452	5,895
North Dakota.....	10	70	7	15	43	189	350	336	11	13	9	13	8	113
South Dakota.....	16	119	11	23	78	226	517	741	14	9	4	5	16	171
Nebraska.....	80	618	59	119	411	1,594	3,235	4,827	87	3	2	6	77	1,150
Kansas.....	124	1,019	90	176	669	2,561	3,993	6,507	133	2	2	5	144	2,112
South Region.....	4,899	34,989	3,712	7,349	22,620	79,103	97,601	176,922	7,057	1	1	1	4,677	59,647
South Atlantic Division.....	2,579	18,028	1,963	3,891	11,612	38,885	45,384	84,730	3,326	1	1	1	2,502	29,313
Delaware.....	70	735	35	72	282	1,281	1,952	3,222	78	1	4	2	70	958
Maryland.....	254	2,184	176	347	1,311	4,279	4,812	9,113	312	1	1	2	288	3,781
District of Columbia.....	20	201	10	18	93	350	244	592	26	2	2	9	23	333
Virginia.....	351	2,448	270	528	1,610	5,173	5,738	10,950	435	1	1	1	340	4,068
West Virginia.....	118	1,018	89	175	701	2,388	2,189	4,562	241	1	1	2	124	2,170
North Carolina.....	699	4,267	566	1,119	2,950	9,824	11,104	20,881	810	1	1	2	643	6,606
South Carolina.....	324	2,027	265	536	1,449	4,235	4,801	9,011	499	1	1	1	304	3,030
Georgia.....	434	2,866	340	675	1,920	6,533	9,372	16,396	508	1	1	2	423	4,684
Florida.....	309	2,282	212	422	1,296	4,822	5,172	10,005	417	2	1	2	285	3,683
East South Central Division.....	1,168	7,920	927	1,814	5,527	18,665	21,106	39,644	1,358	1	1	1	1,092	13,718
Kentucky.....	243	1,855	187	358	1,247	5,168	5,601	10,732	284	1	1	1	225	3,636
Tennessee.....	444	2,955	347	680	2,007	6,729	7,410	14,079	530	1	1	2	418	4,921
Alabama.....	299	2,040	243	480	1,486	4,531	5,041	9,561	356	2	1	2	289	3,526
Mississippi.....	182	1,070	150	296	788	2,237	3,054	5,272	189	2	1	2	160	1,635
West South Central Division.....	1,152	9,041	822	1,644	5,481	21,553	31,111	52,548	2,373	1	1	1	1,083	16,616
Arkansas.....	165	980	135	269	715	2,420	3,262	5,626	172	1	3	4	144	1,558
Louisiana.....	161	1,347	119	247	898	3,505	5,841	9,334	537	2	1	2	165	2,790
Oklahoma.....	132	1,024	88	174	567	1,834	2,719	4,554	158	2	2	2	118	1,346
Texas.....	694	5,690	480	956	3,301	13,794	19,290	33,034	1,506	1	1	2	658	10,922
West Region.....	2,220	20,442	1,481	2,888	11,516	41,000	45,739	87,151	2,689	1	1	1	2,365	34,197
Mountain Division.....	351	2,917	240	469	1,751	5,875	8,543	14,467	629	1	1	2	315	4,522
Montana.....	20	159	15	31	119	330	882	1,232	50	4	3	7	20	312
Idaho.....	44	316	33	64	203	669	1,002	1,662	54	3	2	7	37	503
Wyoming.....	6	51	5	10	38	119	244	363	2	11	13	9	6	86
Colorado.....	117	1,072	78	155	646	2,089	2,591	4,699	238	2	2	3	104	1,509
New Mexico.....	23	142	17	33	89	273	497	766	44	8	7	40	17	205
Arizona.....	83	721	52	102	387	1,385	1,776	3,181	142	2	2	2	77	995
Utah.....	50	391	34	63	223	864	1,388	2,258	72	3	2	2	47	778
Nevada.....	■	65	5	11	40	146	163	307	22	3	3	2	7	139
Pacific Division.....	1,869	17,525	1,241	2,419	9,765	35,125	37,196	72,684	2,060	1	1	1	2,050	29,675
Washington.....	221	2,062	148	277	1,206	4,117	5,561	10,731	365	1	1	2	271	3,764
Oregon.....	169	1,407	132	253	1,012	2,807	3,390	6,183	232	2	2	3	163	2,061
California.....	1,447	13,799	937	1,844	7,382	27,568	27,542	54,440	1,417	1	1	2	1,584	23,394
Alaska.....	8	80	6	12	59	198	238	430	19	7	5	12	8	130
Hawaii.....	24	177	18	34	106	435	466	900	22	5	5	11	25	326

(S) Data withheld because the estimates did not meet publication standards.

(X) Not applicable.

<sup>1</sup>The totals at the U.S. level were derived from separate tabulations based on industry rather than State detail, and have been published in the 1972 Census of Manufactures preliminary report, "General Statistics for Industry Groups and Industries," MC72(P)-2. The sum of the State detail may not add to the U.S. total because of (1) independent rounding and (2) independent review and correction to the industry tabulations.

<sup>2</sup>A description of the standard error of estimate is given in the introduction to the 1971 Annual Survey of Manufactures, "General Statistics for Industry Groups and Industries," M71(SA)-1. The percentage standard errors shown for columns A, F, and I are the approximate relative standard errors of the estimate of level.



## Appendix. EXPLANATION OF TERMS

**All Employees**—The category "all employees" comprises all full-time and part-time employees on the payrolls of operating manufacturing establishments who worked or received pay for any part of the pay period including the 12th of the months specified on the report form. Included are all persons on paid sick leave, paid holidays, and paid vacations during these pay periods. Excluded are members of the Armed Forces and pensioners carried on the active rolls but not working during the period. Officers of corporations are included as employees; proprietors and partners of unincorporated firms, however, are excluded from the total.

**Production and Related Workers**—Workers (up through the working foreman level) engaged in fabricating, processing, assembling, inspection, receiving, storage, handling, packing, warehousing, shipping (but not delivering), maintenance, repair, janitorial, and watchman services, product development, auxiliary production for plants own use (e.g. power plant), recordkeeping, and other services closely associated with these production operations at the establishment covered by the report are included. Supervisory employees above the working foreman level are excluded from the category.

**All Other Employees**—Represents nonproduction personnel of the manufacturing establishment, including those engaged in the following activities: Factory supervision above the working foreman level, sales (including driver salesmen), sales delivery (highway truck drivers and their helpers), advertising, credit, collection, installation and servicing of own products, clerical and routine office functions, executive, purchasing, financing, legal, personnel (including cafeteria, medical, etc.) professional, and technical. Also included are employees on the payroll of the manufacturing establishment engaged in the construction of major additions or alterations to the plant and who are utilized as a separate work force.

**Central Administrative Office and Auxiliary Unit Employees**—Respondents were asked to file separate reports for any central administrative offices or auxiliary units at a different location from the establishments served or at the same location as one of these establishments but not operated as an integral part thereof and administering and serving two or more

establishments. The functions of employees in central administrative offices include general company policy determination, planning, and management (i.e. company purchasing, accounting, general engineering, direction of company personnel matters, and legal and patent matters). Auxiliaries are storage facilities, garages, repair shops, purchasing offices, sales promotion offices, and research laboratories serving the plants or central management of the company.

The employment and payroll data shown for central administrative offices and auxiliary units represent the total for all such units which primarily serve manufacturing plants.

**Average Employment**—The Annual Survey of Manufactures report forms requested employment figures for "production and related workers" for four selected pay periods (i.e. production workers during pay periods including the 12th of March, May, August, and November). For "all other employees", only a March 12th figure was requested. Thus, the "annual average" is composed of an average of the four monthly figures for the "production workers" plus this March figure for "all other employees."

**Payroll**—This total includes the gross earnings paid in the calendar year to all employees on the payroll of operating manufacturing establishments. Respondents were told they could follow the definition of payrolls used for calculating the Federal withholding tax. It includes all forms of compensation such as salaries, wages, commissions, dismissal pay, all bonuses, vacation and sick-leave pay, and compensation in kind, prior to such deductions as employees Social Security contributions, withholding taxes, group insurance, union dues, and savings bonds. The total includes salaries of officers of these establishments, if a corporation; it excludes payments to the proprietor or partners, if an unincorporated concern. Also excluded are payments to members of Armed Forces and pensioners carried on the active payrolls of manufacturing establishments.

**Production and Related Worker Man-Hours**—This total consists of all plant man-hours of production and related workers as defined above. It represents all man-hours worked or paid for at the plant including actual overtime hours (not straight-time equivalent hours). It excludes hours paid for vacations, holidays,



or sick leave when the employee was not at the plant. Where employees elected to work during the vacation period, only actual hours worked by such employees were reported.

**Value Added by Manufacture**—Value added by manufacture is derived by subtracting the total cost of materials (including material, supplies, fuel, electric energy, cost of resales, and miscellaneous receipts) from the value of shipments (including resales) and other receipts and adjusting the resulting amount by the net change in finished products and work-in-process inventories between the beginning and end of the year.

Value added avoids the duplication in the value-of-shipments figure which results from the use of products of some establishments as materials by others. Consequently, it is considered to be the best value measure available for comparing the relative economic importance of manufacturing among industries and geographic areas.

**Cost of Materials**—The term “cost of materials” refers to direct charges actually paid or payable for items consumed or put into production during the year, including freight charges and other direct charges incurred by the establishment in acquiring these materials. Manufacturers included the cost of materials or fuel consumed regardless of whether these items were purchased by the individual establishment from other companies, transferred to it from other establishments of the same company, or withdrawn from inventory during the year.

To arrive at the industry total cost of materials, separate figures were obtained for (a) the total delivered cost of all raw materials, semifinished goods, parts, components, containers, scrap, and supplies put into production or used as operating supplies and for repair and maintenance during that year; (b) the amount paid for electric energy purchased; (c) the amount paid for all fuel consumed for heat, power, or the generation of electricity; (d) the cost of work done by others on parts furnished by manufacturing establishments (contract work); (e) cost of products bought and resold in the same condition. The total excludes the cost of services used, such as advertising, insurance, telephone, etc., and research, developmental, and consulting services of other establishments; it also excludes overhead cost, such as depreciation charges, rent, interest, royalties, etc.; and it excludes materials, machinery, and equipment used in plant expansion or capitalized repairs which are chargeable to fixed-asset accounts.

**Value of Shipments**—The amounts under value of shipments are the received or receivable net selling values, f.o.b. plant, after discounts and allowances, and excluding freight charges and excise taxes. However, where the products of an industry are customarily delivered by the manufacturing establishments (baby products, fluid milk, and soft drinks, for example) the value of shipments is based on the delivered price of the goods rather than the f.o.b. plant price.

Under the general heading of shipments, manufacturers were asked to include all items made by or for each establishment from materials owned by it, whether sold, transferred to other plants of the same company, or shipped on consignment. Also included were receipts for contract work and for such miscellaneous activities as sale of scrap and refuse, installation work by manufacturing plant and employees, research and development work, and repair work. The net selling value of products made in one plant on a contract basis from materials owned by others was reported by the plant providing the materials. The value of products bought and resold without further processing (merchandising) was reported separately and is included in the value of shipments totals for each industry. The inclusion of resales in total value of shipments is a change in procedure initiated with the 1958 Census of Manufactures.

In the case of multiunit companies, the manufacturer was requested to report the value of products transferred to other establishments of the same company (i.e., other manufacturing plants, separate sales branches, or retail stores) as though the establishments were a separate economic unit. The company was requested to include in “value of interplant transfers within the company” not only the direct cost of production but also a reasonable proportion of “all other costs” (including company overhead) and profit.

For a relatively few industries, (canning and preserving, other than meats and apparel) where shipment figures are generally not maintained, the “value of production” was requested. These instances are noted in the tables for the industries involved.

**Duplication in Cost of Materials and Value of Products**—The aggregate of the cost of materials and value of shipments figures for industry groups and for all manufacturing industries includes large amounts of duplication since the products of some industries are used as materials by others. With some important exceptions, such as motor vehicles and parts, this duplication is not significant within the individual industries but arises from the addition of related industries representing successive stages in the production of a finished manufactured product. Examples are the addition of flour mills to bakeries in the food group and the addition of pulp mills to paper mills in



the paper and allied products group of industries. Estimates to the overall extent of this duplication indicate that the value of manufactured products exclusive of such duplication—the value of finished manufactures—tends to approximate two-thirds of the value of products reported in the annual survey.

In the past, the Bureau of the Census has not published figures for cost of materials or value of shipments if they contained significant duplication, even if they could be derived at the industry group level by adding the 4-digit industry detail. Effective with the 1962 Annual Survey of Manufactures, these figures were shown at all industry levels for the United States to meet the request for their use in studies in which the presence of an intermediate amount of duplication is not a limiting factor. However, they are appropriately footnoted. Effective with the 1964 Annual Survey of Manufactures, these industry-group totals are also shown at the State, standard metropolitan statistical area, and large county level.

Even where no significant amount of duplication is involved, value-of-shipments figures are deficient as measures of the relative economic importance of individual manufacturing industries or geographic areas because of the wide variation in ratio of materials, labor, and other processing cost to value of shipments, both among industries and within the same industry.

**Expenditures for Plant and Equipment**—For establishments in operation and establishments under construction but not yet in operation, manufacturers were asked to report capital expenditures for (a) permanent additions and major alterations to manufacturing establishments and (b) new machinery and equipment used for replacement purposes and additions to plant capacity if they are the type for which depreciation accounts are ordinarily maintained.

These totals exclude that portion of expenditures for new facilities and equipment leased from nonmanufacturing concerns, new facilities owned by the Federal Government but operated under contract by private companies, and plant and equipment furnished to the manufacturers by communities and organizations. Expenditures for used plant and equipment, expenditures for land, and cost of maintenance and repairs charged as current operating expense are also omitted.

**End-of-Year Inventories**—Respondents were asked to report their inventories at approximate current cost if feasible; otherwise "at book values." Since different methods of inventory valuation are used (LIFO, FIFO, etc.), the definition of the value-of-inventories aggregate for all establishments in an industry is not precise. The figures on change in inventory between years are of considerably greater importance.

**U.S. DEPARTMENT OF COMMERCE**  
**Social and Economic Statistics Administration**  
BUREAU OF THE CENSUS  
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PRELIMINARY REPORT  
**1972 CENSUS OF  
MANUFACTURES**  
AREA SERIES

72(P)-S1

U. S. DEPARTMENT OF COMMERCE • Social and Economic Statistics Administration • BUREAU OF THE CENSUS

d April 1974

**Alabama**

Value added by manufacturing in 1972 in the State of Alabama amounted to \$5,049 million, an 11-percent increase from 1971 and a 43-percent increase from 1967.

This report presents preliminary results from the 1972 Census of Manufactures for the State, its Standard Metropolitan Statistical Areas, and its counties.

Data are provided for industry groups within the State. Historical data, back to 1958, are included for the State as a whole,

and 1967 figures on employment and value added are provided for the smaller areas.

The figures in this report have been subjected to only preliminary review and must be regarded as approximations of the final census figures. No adjustments have been made in the value figures for changes in price level.

For an explanation of the terms used in the tables, see the appendix at the end of this report.

TABLE 1. General Statistics for the State: 1972 and Earlier Years

(See appendix, Explanation of Terms)

Year	Establishments		All employees <sup>1</sup>		Production workers			Value added by manufacture	Cost of materials <sup>2</sup>	Value of shipments <sup>2</sup>	Capital expenditures, new
	Total	With 20 employees or more	Number	Payroll	Number	Man-hours	Wages				
	(number)	(number)	(1,000)	(million dollars)	(1,000)	(millions)	(million dollars)				
	ALABAMA										
1972 Census .....	4,929	1,591	321.2	2,394.5	260.1	516.7	1,725.3	5,048.5	6,233.8	11,194.5	374.5
1971 ASM .....	(NA)	(NA)	299.0	2,040.1	243.1	479.8	1,485.6	4,530.9	5,041.2	9,560.9	355.5
1970 ASM .....	(NA)	(NA)	304.7	1,961.0	248.5	487.9	1,419.2	4,339.6	4,657.9	8,947.4	417.2
1969 ASM .....	(NA)	(NA)	309.8	1,939.5	252.5	504.8	1,419.7	4,315.1	4,703.2	8,963.2	382.8
1968 ASM .....	(NA)	(NA)	297.9	1,778.5	242.0	481.1	1,286.8	3,981.7	4,277.3	8,229.4	347.1
1967 Census .....	4,951	1,446	288.8	1,602.8	235.3	466.6	1,166.6	3,525.5	3,956.4	7,442.9	378.9
1966 ASM .....	(NA)	(NA)	294.4	1,584.6	238.8	478.4	1,126.0	3,451.1	3,821.7	7,197.2	423.7
1965 ASM .....	(NA)	(NA)	272.9	1,419.2	222.6	448.2	1,024.2	2,954.2	3,463.4	6,393.6	371.9
1964 ASM .....	(NA)	(NA)	252.6	1,265.9	206.3	414.4	913.3	2,617.0	3,068.6	5,614.1	282.2
1963 Census .....	4,079	1,257	243.8	1,162.4	197.6	391.0	842.3	2,325.2	(NA)	(NA)	147.4
1962 ASM .....	(NA)	(NA)	234.9	1,067.4	192.2	372.2	776.5	2,075.0	(NA)	(NA)	129.1
1961 ASM .....	(NA)	(NA)	227.5	997.3	185.3	358.7	723.9	1,941.0	(NA)	(NA)	166.7
1960 ASM .....	(NA)	(NA)	229.5	982.8	187.6	364.9	719.7	1,957.6	(NA)	(NA)	202.3
1959 ASM .....	(NA)	(NA)	229.8	964.4	188.2	370.3	708.0	1,884.2	(NA)	(NA)	151.1
1958 Census .....	3,956	1,195	229.8	920.0	188.7	363.2	677.6	1,770.5	(NA)	(NA)	165.1

Note: "ASM" data are based on a representative sample of manufacturing establishments canvassed in the Annual Survey of Manufactures. These estimates may differ from the results of a complete canvass of all manufacturing establishments. The standard errors associated with these estimates are published in the annual survey of manufactures volumes for this period. For comparative purposes, the 1972 ASM estimate for the State of Alabama was 320 thousand employees, and \$4,834 million in value added with corresponding standard error of estimate of 2 and 1.

(NA) Not available.

<sup>1</sup>Includes employment and payroll at central administrative offices and auxiliary units. (For a definition of these units, see appendix.)

<sup>2</sup>The total cost of materials and value of shipments may include extensive duplication arising from shipments between establishments in the same industry classification. (For a more complete explanation, see appendix.)

TABLE 2. General Statistics for the State, Standard Metropolitan Statistical Areas, and Counties: 1972 and 1967

(See appendix, Explanation of Terms)

State, standard metropolitan statistical areas, and counties <sup>1</sup>	1972										1967		
	Establishments		All employees <sup>2</sup>		Production workers			Value added by manufac- ture	Cost of materials <sup>3</sup>	Value of shipments <sup>3</sup>	Capital expendi- tures, new	All employees	Value added by manufac- ture
	Total	With 20 employees or more	Number	Payroll	Number	Man-hours	Wages						
	(number)	(number)	(1,000)	(million dollars)	(1,000)	(million)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(1,000)	(million dollars)
ALABAMA, TOTAL . . . . .	4 929	1 591	321.2	2 394.5	260.1	516.7	1 725.3	5 048.5	6 233.8	11 194.5	374.5	288.8	3 525.5
STANDARD METROPOLITAN STATISTICAL AREAS <sup>4</sup>													
BIRMINGHAM . . . . .	933	371	68.8	590.1	53.1	104.2	416.4	1 119.3	1 453.9	2 562.4	103.6	69.2	916.9
COLUMBUS . . . . .	203	81	18.9	130.8	14.9	32.4	87.6	329.5	313.8	646.3	16.7	18.2	193.7
PORTION IN GEORGIA . . . . .	150	66	16.9	115.9	13.1	28.5	75.7	284.7	261.0	548.8	14.1	16.9	169.6
PORTION IN ALABAMA . . . . .	53	15	2.0	14.9	1.8	3.9	11.9	44.8	52.8	97.5	2.6	1.3	24.1
FLORENCE . . . . .	139	50	11.7	110.4	9.6	19.7	84.3	203.8	425.4	622.4	10.7	11.6	170.5
GADSDEN . . . . .	90	35	10.9	110.3	8.7	17.9	85.6	267.1	237.5	498.6	11.0	12.4	223.6
HUNTSVILLE . . . . .	280	99	27.0	241.0	20.0	40.5	146.2	447.2	441.3	882.3	27.2	21.4	251.8
MOBILE . . . . .	410	123	23.2	199.4	18.0	35.5	138.1	477.7	562.3	1 027.4	32.8	20.3	303.2
MONTGOMERY . . . . .	273	91	11.5	74.9	8.6	16.9	49.3	166.8	209.7	374.6	14.9	10.1	105.0
TUSCALOOSA . . . . .	122	50	10.8	86.1	8.8	17.7	62.1	176.6	234.3	408.7	12.4	9.1	108.4
COUNTIES													
AUTAUGA . . . . .	24	8	1.9	13.2	1.6	2.9	9.7	32.8	43.9	74.9	1.5	1.2	16.0
BALDWIN . . . . .	107	26	3.3	19.3	2.8	5.4	14.8	46.3	80.1	125.2	2.9	2.8	23.3
BARBOUR . . . . .	69	23	2.1	11.3	1.8	3.6	8.8	28.6	38.5	66.0	4.0	1.5	11.2
BIBB . . . . .	36	10	1.5	7.5	1.4	2.8	6.4	13.1	8.6	21.4	1.2	1.0	6.1
BLOUNT . . . . .	20	5	1.1	5.4	1.0	1.8	4.4	16.6	17.3	34.5	.3	1.4	10.5
BULLOCK . . . . .	33	7	1.1	5.8	1.0	2.0	4.5	11.5	18.4	29.5	1.4	.5	3.9
BUTLER . . . . .	84	13	2.3	12.7	2.1	4.3	10.3	26.5	22.0	51.1	1.6	2.1	13.2
CALHOUN . . . . .	121	53	11.8	82.2	10.0	20.4	64.7	140.5	155.6	289.0	8.5	10.5	97.2
CHEROKEE . . . . .	20	5	1.0	4.3	.9	1.8	3.3	7.3	3.4	10.2	.2	.8	5.5
CHILTON . . . . .	43	9	1.1	5.5	.9	1.8	4.1	7.3	10.8	20.1	.3	.6	3.6
CLARKE . . . . .	86	18	3.2	19.4	2.8	5.8	15.9	43.3	47.6	90.8	8.4	3.7	26.8
CLAY . . . . .	35	8	1.2	6.6	1.0	2.0	4.4	13.8	10.2	23.5	1.0	1.1	7.5
CLEBURNE . . . . .	26	7	1.3	7.5	1.2	2.4	6.7	18.9	41.2	59.9	.5	1.0	8.9
COFFEE . . . . .	55	17	3.4	18.3	2.9	5.4	13.7	39.2	53.9	90.6	1.9	2.8	25.9
COLBERT . . . . .	85	28	8.6	91.7	7.1	14.9	71.7	171.8	375.8	540.3	7.3	9.0	146.0
CONECUH . . . . .	47	7	1.3	6.4	1.1	2.3	5.1	10.9	9.2	19.4	.3	1.0	6.4
COOSA . . . . .	38	7	.8	4.4	.6	1.3	3.3	8.4	9.6	17.9	.3	.7	5.0
COVINGTON . . . . .	68	17	5.3	26.0	4.6	8.4	20.0	39.7	39.1	77.0	2.3	5.1	32.0
CRENSHAW . . . . .	48	8	1.1	4.8	.9	1.7	3.8	8.2	7.6	15.8	.3	.7	3.7
CULLMAN . . . . .	66	25	4.5	25.5	3.8	7.3	18.8	50.8	80.0	130.8	4.3	3.5	27.0
DALE . . . . .	45	5	1.0	4.0	.8	1.5	3.4	7.7	7.3	14.3	.7	1.9	13.1
DALLAS . . . . .	74	30	4.5	24.4	3.8	7.4	18.6	63.0	83.1	145.5	4.1	4.5	42.2
DE KALB . . . . .	74	28	3.5	18.8	3.0	5.7	14.2	42.1	53.8	94.4	3.3	2.5	17.6
ELMORE . . . . .	39	8	.8	4.0	.7	1.4	3.3	8.2	9.4	17.4	1.8	.8	7.4
ESCAMBIA . . . . .	84	15	3.2	16.3	2.8	5.4	12.6	67.1	64.7	130.4	5.2	3.3	42.1
ETOWAH . . . . .	90	35	10.9	110.3	8.7	17.9	85.6	267.1	237.5	498.6	11.0	12.4	223.6
FAYETTE . . . . .	39	10	1.6	8.8	1.4	2.6	6.8	13.6	20.7	36.1	3.5	1.6	13.8
FRANKLIN . . . . .	44	16	2.0	11.0	1.7	3.2	8.6	19.5	43.1	61.7	1.5	1.5	12.6
GENEVA . . . . .	33	8	1.7	7.1	1.6	2.9	6.3	23.5	15.1	38.7	.7	1.7	15.4
HALE . . . . .	28	5	1.0	5.1	.6	1.0	2.1	6.8	22.9	29.7	.6	.7	3.5
HOUSTON . . . . .	87	31	6.7	42.3	4.9	10.0	26.5	77.5	93.6	169.1	2.9	4.4	36.7
JACKSON . . . . .	46	24	4.4	34.5	3.7	7.3	25.8	62.8	156.9	209.3	4.8	3.2	22.5
JEFFERSON . . . . .	730	295	59.2	531.2	44.7	87.9	370.4	989.2	1 256.1	2 234.4	93.3	63.2	852.8
LAMAR . . . . .	24	9	1.5	6.9	1.2	2.2	5.2	11.0	14.8	25.9	1.6	1.9	7.1
LAUDERDALE . . . . .	54	22	3.1	18.7	2.5	4.8	12.6	32.0	49.6	82.1	3.4	2.6	24.5
LAWRENCE . . . . .	13	8	1.5	9.9	1.3	2.6	7.5	22.4	19.6	42.2	(D)	1.0	2.9
LEE . . . . .	79	23	7.0	52.2	5.7	12.1	39.5	101.9	109.2	208.3	5.9	5.8	63.4
LIMESTONE . . . . .	26	10	1.7	8.4	1.5	3.0	6.8	18.0	31.5	49.4	.6	.8	4.4
LOWNDES . . . . .	37	5	.7	3.2	.7	1.3	2.7	5.4	4.4	10.0	.1	.8	6.0
MADISON . . . . .	163	56	18.9	195.1	13.0	26.4	109.6	362.0	181.1	540.8	6.9	16.9	210.9
MARENGO . . . . .	52	12	2.0	13.2	1.7	3.5	10.6	28.1	39.6	67.8	2.3	2.1	33.7
MARION . . . . .	52	21	5.4	30.9	4.5	8.4	22.5	85.2	77.1	161.8	4.3	4.3	61.1
MARSHALL . . . . .	91	33	6.4	37.5	5.5	11.1	29.8	67.2	228.7	292.1	19.8	3.7	36.5
MOBILE . . . . .	303	97	19.9	180.1	15.2	30.1	123.3	431.4	482.2	902.2	29.9	17.5	279.9
MONROE . . . . .	49	7	2.4	13.1	2.2	4.3	10.4	24.3	14.7	36.1	2.4	2.7	33.4
MONTGOMERY . . . . .	210	75	8.8	57.7	6.3	12.6	36.3	125.8	156.4	282.3	11.6	8.1	81.6
MORGAN . . . . .	123	55	11.7	108.5	8.5	17.6	65.6	363.8	401.9	755.7	23.9	9.5	206.0
PERRY . . . . .	23	8	1.2	4.6	1.1	1.8	4.1	7.0	5.3	12.3	.3	.9	5.0
PICKENS . . . . .	42	15	1.9	11.2	1.7	3.2	9.2	32.0	14.8	46.6	2.6	1.8	15.5
PIKE . . . . .	69	13	1.9	8.7	1.7	3.1	7.3	17.6	32.1	49.8	.8	1.6	9.6
RANDOLPH . . . . .	40	14	2.2	11.3	2.0	3.7	9.6	19.7	23.1	41.8	1.9	2.1	12.4
RUSSELL . . . . .	53	15	2.0	14.9	1.8	3.9	11.9	44.8	52.8	97.5	2.6	1.3	24.1
ST. CLAIR . . . . .	33	12	1.5	11.2	1.3	2.6	8.6	30.7	28.8	59.7	.5	1.1	10.4
SHELBY . . . . .	85	33	3.9	25.1	3.3	6.5	18.6	49.4	54.5	103.9	7.2	2.4	30.9
SUMTER . . . . .	37	13	1.4	7.9	1.2	2.5	6.5	21.8	21.8	43.5	1.6	.7	5.3
TALLADEGA . . . . .	102	43	8.8	61.6	7.5	15.5	48.5	117.8	144.7	263.9	12.2	8.6	82.8
TALLAPOOSA . . . . .	69	25	9.1	48.2	8.3	16.7	39.5	86.7	112.3	196.0	7.1	8.5	60.9
TUSCALOOSA . . . . .	122	50	10.8	86.1	8.8	17.7	62.1	176.6	234.3	408.7	12.4	9.1	108.4
WALKER . . . . .	85	31	4.2	22.6	3.8	7.2	18.8	50.0	114.5	164.4	2.6	2.5	22.8
WILCOX . . . . .	61	7	1.1	7.8	.9	1.7	6.1	19.6	25.5	44.9	1.2	.6	3.8
WINSTON . . . . .	86	34	6.5	39.8	5.4	10.3	29.2	79.3	145.8	223.4	5.3	2.2	18.8

(D) Withheld to avoid disclosing figures for individual companies.

<sup>1</sup>Some counties were withheld from publication in order to (a) avoid disclosing figures for individual companies or (b) permit further checking of the figures for smaller counties. Additional detail will appear in the final report for this State.<sup>2</sup>Includes employment and payroll at central administrative offices and auxiliary units. (For a definition of these units, see appendix.)<sup>3</sup>The total cost of materials and value of shipments may include extensive duplication arising from shipments between establishments in the same industry classification. (For a more complete explanation, see appendix.)<sup>4</sup>The standard metropolitan statistical areas in this State are defined as follows:

BIRMINGHAM SMSA: Consists of Jefferson, St. Clair, Shelby, and Walker Counties, AL.  
 COLUMBUS, GA-AL, SMSA: Consists of Chattahoochee and Muscogee Counties, GA, and Russell County, AL.  
 FLORENCE SMSA: Consists of Colbert and Lauderdale Counties, AL.  
 GADSDEN SMSA: Coextensive with Etowah County, AL.  
 HUNTSVILLE SMSA: Consists of Limestone, Madison, and Marshall Counties, AL.  
 MOBILE SMSA: Consists of Baldwin and Mobile Counties, AL.  
 MONTGOMERY SMSA: Consists of Autauga, Elmore, and Montgomery Counties, AL.  
 TUSCALOOSA SMSA: Coextensive with Tuscaloosa County, AL.



TABLE 3. General Statistics for the State, by Industry Groups and Industries: 1972 and 1967

(See appendix, Explanation of Terms)

Code	Industry	1972										1967		
		Establishments		All employees		Production workers			Value added by manufacture	Cost of materials <sup>1</sup>	Value of shipments <sup>1</sup>	Capital expenditures, new	All employees	Value added by manufacture
		Total	With 20 employees or more	Number	Payroll	Number	Man-hours	Wages						
		(number)	(number)	(1,000)	(million dollars)	(1,000)	(million)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(1,000)	(million dollars)
	ALL INDUSTRIES, TOTAL <sup>2</sup> . . . . .	4 929	1 591	321.2	2 394.5	260.1	516.7	1 725.3	5 048.5	6 233.8	11 194.5	374.5	288.8	3 525.5
20	FOOD AND KINDRED PRODUCTS. . . . .	415	191	24.6	158.8	16.2	33.0	85.7	361.6	986.1	1 343.0	24.4	23.6	261.6
201	MEAT PRODUCTS. . . . .	86	42	9.4	52.7	8.4	16.9	43.0	92.5	377.9	470.5	5.8	7.6	61.3
2011	MEATPACKING PLANTS. . . . .	44	14	2.1	17.0	1.7	3.5	11.8	30.9	107.9	139.3	1.5	2.3	19.0
2016	POULTRY DRESSING PLANTS. . . . .	27	23	6.7	32.5	6.3	12.7	29.1	57.5	244.4	301.5	4.0	(NA)	(NA)
202	DAIRY PRODUCTS. . . . .	46	27	3.5	25.3	1.2	2.3	6.3	45.5	125.2	171.0	4.2	3.9	45.2
2024	ICE CREAM AND FROZEN DESSERTS. . . . .	7	4	.5	3.8	.2	.4	1.5	7.5	16.1	23.8	.3	.4	4.8
2026	FLUID MILK. . . . .	33	23	3.0	21.2	.9	1.9	4.7	37.0	106.5	143.7	3.8	3.4	39.9
203	PRESERVED FRUITS AND VEGETABLES. . . . .	13	10	1.4	6.8	1.1	2.1	4.5	21.7	39.2	61.0	1.5	(NA)	(NA)
2035	PICKLES, SAUCES, AND SALAD DRESSINGS	5	4	.4	2.4	.3	.7	1.6	8.5	15.6	24.1	.5	.4	4.6
204	GRAIN MILL PRODUCTS. . . . .	79	17	1.8	15.0	1.1	2.6	7.4	45.9	216.6	262.0	2.5	1.8	38.0
205	BAKERY PRODUCTS. . . . .	38	21	2.8	22.0	1.5	3.1	9.6	47.3	34.7	82.0	3.8	3.6	36.2
206	SUGAR AND CONFECTIONERY PRODUCTS. . . . .	10	5	.5	2.5	.5	.9	2.1	10.9	22.9	31.8	.5	(NA)	(NA)
2065	CONFECTIONERY PRODUCTS. . . . .	9	4	.5	2.5	.5	.9	2.1	10.9	22.9	31.8	.5	CC	(D)
207	FATS AND OILS. . . . .	20	14	.8	5.7	.7	1.5	4.1	18.0	78.2	93.7	1.1	(NA)	(NA)
2077	ANIMAL AND MARINE FATS AND OILS. . . . .	10	6	.3	1.7	.2	.4	1.0	5.2	7.4	12.5	.4	.2	3.1
208	BEVERAGES. . . . .	59	42	2.9	19.1	.9	2.1	5.1	57.8	57.0	114.6	3.1	2.9	34.4
209	MISC. FOODS AND KINDRED PRODUCTS. . . . .	64	13	1.5	9.6	.8	1.5	3.6	22.0	34.3	56.4	1.8	(NA)	(NA)
2099	FOOD PREPARATIONS, NEC. . . . .	23	7	1.0	6.7	.5	.8	2.3	15.1	18.3	33.4	1.0	.8	12.9
22	TEXTILE MILL PRODUCTS. . . . .	151	125	43.5	253.8	40.1	84.5	219.4	442.1	683.7	1 124.9	41.7	40.0	322.1
2211	WEAVING MILLS, COTTON. . . . .	26	25	16.5	99.0	15.5	33.2	88.2	156.0	162.2	325.0	11.2	19.0	160.7
2221	WEAVING MILLS, SYNTHETICS. . . . .	8	8	4.8	32.0	4.3	9.8	26.3	53.8	65.9	121.2	8.1	EE	(D)
225	KNITTING MILLS. . . . .	33	23	6.6	32.6	6.2	11.6	28.3	60.9	99.2	157.1	6.0	5.6	37.8
228	YARN AND THREAD MILLS. . . . .	42	41	8.6	50.5	8.0	17.4	44.4	85.5	186.2	270.3	10.7	6.7	52.7
229	MISCELLANEOUS TEXTILE GOODS. . . . .	20	11	2.8	16.0	2.5	5.1	13.4	30.2	86.6	115.3	1.5	2.4	19.2
23	APPAREL, OTHER TEXTILE PRODUCTS. . . . .	254	188	46.7	203.2	42.7	77.9	173.9	367.0	298.6	658.2	13.9	42.7	254.8
232	MEN'S AND BOYS' FURNISHINGS. . . . .	90	87	21.5	89.6	19.7	35.0	77.2	159.6	116.4	274.7	5.4	21.9	115.6
2321	MEN'S AND BOYS' SHIRTS AND NIGHTWEAR	44	43	11.4	46.8	10.6	18.5	41.5	91.3	72.5	163.3	2.2	10.5	66.1
2327	MEN'S AND BOYS' SEPARATE TROUSERS. . . . .	19	19	4.1	18.1	3.7	6.5	14.7	26.6	12.8	38.9	2.3	5.7	24.9
2328	MEN'S AND BOYS' WORK CLOTHING. . . . .	22	21	4.7	19.6	4.4	8.1	17.3	35.2	26.3	61.6	(D)	4.6	20.2
233	WOMEN'S, AND MISSES' OUTERWEAR. . . . .	57	41	5.5	21.9	4.8	8.2	18.5	28.6	7.0	35.4	.7	3.1	15.1
234	WOMEN'S, CHILDREN'S UNDERGARMENTS. . . . .	23	22	11.1	49.6	10.3	19.2	43.3	105.7	44.2	145.7	5.5	10.0	75.9
238	MISC. APPAREL AND ACCESSORIES. . . . .	12	7	1.7	7.1	1.5	3.0	5.6	14.1	7.0	20.8	(D)	1.9	9.7
239	MISC. FABRICATED TEXTILE PRODUCTS. . . . .	54	17	3.1	14.8	2.7	5.5	12.2	23.2	94.6	117.1	1.8	1.7	11.5
2392	HOUSE FURNISHINGS, NEC. . . . .	14	8	1.7	8.1	1.6	3.1	7.0	13.4	76.7	89.6	.7	1.1	7.3
24	LUMBER AND WOOD PRODUCTS. . . . .	1 763	244	26.8	156.6	23.2	45.7	118.2	334.7	519.0	853.4	26.5	(NA)	(NA)
2411	LOGGING CAMPS, LOGGING CONTRACTORS. . . . .	1 163	26	4.0	18.9	3.7	6.3	16.1	42.5	48.9	91.5	6.4	3.4	25.2
242	SAWMILLS AND PLANING MILLS. . . . .	350	117	8.7	48.0	7.7	16.1	37.9	102.6	128.0	231.1	10.6	11.0	75.8
2421	SAWMILLS AND PLANING MILLS, GENERAL. . . . .	322	103	7.6	42.9	6.8	14.1	33.6	94.8	118.9	214.2	10.1	9.7	66.7
243	MILLWORK, PLYWOOD, STRUC. MEMBERS. . . . .	127	44	4.9	29.6	4.2	8.8	21.9	64.5	93.4	157.5	4.0	(NA)	(NA)
2431	MILLWORK. . . . .	58	18	1.6	9.3	1.3	2.5	6.1	22.6	39.7	61.2	1.2	(NA)	(NA)
2435	HARDWOOD VENEER AND PLYWOOD. . . . .	21	13	.9	4.4	.9	1.9	3.7	7.4	7.7	15.1	.4	(NA)	(NA)
244	WOOD CONTAINERS. . . . .	29	13	1.1	4.9	1.0	1.9	4.1	8.3	13.5	22.1	.3	(NA)	(NA)
2441	NAILED WOOD BOXES AND SHOOK. . . . .	7	3	.4	1.6	.4	.6	1.5	3.3	7.0	10.5	(2)	.8	7.1
2448	WOOD PALLETS AND SKIDS. . . . .	13	7	.4	1.8	.4	.6	1.4	3.4	3.9	7.4	.3	(NA)	(NA)
2449	WOOD CONTAINERS, NEC. . . . .	9	3	.3	1.5	.3	.6	1.2	1.6	2.6	4.1	.1	(NA)	(NA)
245	WOOD BUILDINGS AND MOBILE HOMES. . . . .	37	31	6.8	47.5	5.5	10.3	32.3	97.4	206.3	303.4	3.8	(NA)	(NA)
2451	MOBILE HOMES. . . . .	26	21	5.9	41.5	4.8	9.0	28.3	78.8	184.7	263.3	3.1	(NA)	(NA)
2452	PREFABRICATED WOOD BUILDINGS. . . . .	11	10	.9	6.0	.7	1.4	4.0	18.6	21.6	40.1	.6	(NA)	(NA)
249	MISCELLANEOUS WOOD PRODUCTS. . . . .	57	13	1.3	7.6	1.1	2.3	5.7	19.3	28.9	47.7	1.3	(NA)	(NA)
2499	WOOD PRODUCTS, NEC. . . . .	39	6	.6	3.3	.6	1.1	2.7	7.0	7.3	13.9	.5	(NA)	(NA)
25	FURNITURE AND FIXTURES. . . . .	156	60	6.7	38.5	5.8	11.6	29.3	81.1	74.0	152.5	3.9	4.4	36.6
251	HOUSEHOLD FURNITURE. . . . .	111	46	5.3	29.1	4.6	9.0	23.0	60.3	54.2	111.9	3.1	(NA)	(NA)
2511	WOOD HOUSEHOLD FURNITURE. . . . .	60	19	2.4	13.1	2.1	4.4	10.8	25.2	25.0	48.2	2.5	(NA)	(NA)
2512	UPHOLSTERED HOUSEHOLD FURNITURE. . . . .	17	12	1.4	7.0	1.1	2.2	5.3	15.0	11.8	26.7	.3	(NA)	(NA)
2514	METAL HOUSEHOLD FURNITURE. . . . .	10	6	1.1	6.4	.9	1.7	5.1	13.9	8.5	22.0	.1	.9	7.1
2515	MATTRESSES AND BEDSPRINGS. . . . .	24	9	.5	2.7	.4	.8	1.7	6.2	8.9	15.1	.2	.3	3.2
254	PARTITIONS AND FIXTURES. . . . .	19	6	.7	4.6	.6	1.2	2.9	8.4	8.4	17.0	.4	.4	3.4
2542	METAL PARTITIONS AND FIXTURES. . . . .	9	4	.5	3.5	.4	1.0	2.1	6.5	7.2	14.0	.4	AA	(D)
26	PAPER AND ALLIED PRODUCTS. . . . .	60	44	17.4	170.4	14.3	29.7	132.7	471.1	489.7	960.9	30.5	15.0	323.2
2621	PAPERMILLS, EXCEPT BUILDING PAPER. . . . .	6	6	7.7	83.8	6.3	13.0	64.7	173.3	163.0	338.7	15.2	5.9	112.1
264	MISC. CONVERTED PAPER PRODUCTS. . . . .	19	13	3.8	32.9	3.3	6.7	27.5	130.3	134.1	262.8	2.4	3.8	83.2
265	PAPERBOARD CONTAINERS AND BOXES. . . . .	21	14	1.6	9.0	1.4	2.5	6.5	16.8	23.8	40.3	1.5	1.1	8.6
2653	CORRUGATED AND SOLID FIBER BOXES. . . . .	10	7	.8	5.9	.6	1.3	3.9	11.2	17.8	28.7	1.1	.5	4.0
2655	FIBER CANS, DRUMS, SIMILAR PRODUCTS. . . . .	4	2	.5	1.8	.5	.8	1.5	2.9	1.9	4.8	.3	.3	2.2
27	PRINTING AND PUBLISHING. . . . .	383	59	6.9	52.5	4.4	8.2	31.2	128.4	62.3	190.5	6.5	6.3	82.8
2711	NEWSPAPERS. . . . .	119	24	3.3	26.3	1.6	2.9	12.5	64.3	18.7	83.0	3.6	3.0	41.0
275	COMMERCIAL PRINTING. . . . .	190	21	1.9	14.6	1.5	2.8	11.2	27.2	18.4	45.5	1.2	(NA)	(NA)
2752	COMMERCIAL PRINTING, LITHOGRAPHIC. . . . .	52	10	.9	7.3	.7	1.2	5.4	13.8	6.4	20.2	.6	(NA)	(NA)
2761	MANIFOLD BUSINESS FORMS. . . . .	6	5	.7	4.9	.5	1.1	3.5	15.3	16.6	32.0	.2	BB	(D)

See footnotes at end of table.



TABLE 3. General Statistics for the State, by Industry Groups and Industries: 1972 and 1967—Continued

(See appendix, Explanation of Terms)

Code	Industry	1972											1967	
		Establishments		All employees		Production workers			Value added by manufacture	Cost of materials¹	Value of shipments¹	Capital expenditures, new	All employees	Value added by manufacture
		Total	With 20 employees or more	Number	Payroll	Number	Man-hours	Wages						
		(number)	(number)	(1,000)	(million dollars)	(1,000)	(million)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(1,000)	(million dollars)	
28	CHEMICALS AND ALLIED PRODUCTS. .	141	61	11.4	110.5	7.8	15.9	68.0	439.1	472.7	913.1	54.0	11.7	418.2
281	INDUSTRIAL INORGANIC CHEMICALS. . .	25	13	1.9	19.6	1.4	2.6	12.8	80.2	73.5	152.4	11.1	(NA)	(NA)
2851	PAINTS AND ALLIED PRODUCTS. . . . .	14	6	.4	3.9	.2	.4	1.5	8.7	11.2	19.7	.3	BB	(D)
2869	INDUSTRIAL ORGANIC CHEMICALS, NEC. .	5	3	.4	4.9	.3	.6	3.2	29.3	30.8	57.9	.8	(NA)	(NA)
287	AGRICULTURAL CHEMICALS. . . . .	32	13	2.1	19.0	1.4	2.9	11.2	55.7	86.8	152.6	5.3	(NA)	(NA)
289	MISCELLANEOUS CHEMICAL PRODUCTS. .	19	7	1.3	14.9	.9	2.0	9.0	62.0	34.8	97.1	3.5	(NA)	(NA)
30	RUBBER AND MISC. PLASTICS PROD. .	68	30	12.2	121.3	10.0	20.5	95.0	382.3	295.9	662.9	20.8	(NA)	(NA)
3011	TIRES AND INNER TUBES. . . . .	10	6	8.0	90.1	6.7	14.6	75.0	253.7	218.7	465.6	12.4	5.6	134.1
3079	MISCELLANEOUS PLASTICS PRODUCTS. . .	45	19	2.7	24.1	2.0	4.0	14.7	115.7	67.9	175.8	7.8	(NA)	(NA)
31	LEATHER AND LEATHER PRODUCTS. . .	8	4	1.3	6.7	1.2	2.3	5.8	11.9	16.8	27.9	(Z)	CC	(D)
32	STONE, CLAY, AND GLASS PRODUCTS. .	299	100	8.5	65.1	6.6	13.7	47.1	152.5	123.1	275.1	40.5	8.4	113.7
3241	CEMENT, HYDRAULIC. . . . .	9	8	1.1	12.8	.9	1.8	10.2	36.9	24.6	60.9	(D)	1.4	32.3
325	STRUCTURAL CLAY PRODUCTS. . . . .	25	20	1.5	10.8	1.3	2.7	8.4	20.1	13.5	35.9	1.5	2.1	23.3
3251	BRICK AND STRUCTURAL CLAY TILE. . . .	15	12	.7	4.1	.6	1.2	3.0	9.2	5.6	14.6	1.1	1.2	12.3
3255	CLAY REFRACTORIES. . . . .	7	5	.4	3.8	.3	.7	3.0	7.2	4.6	13.6	.3	.3	3.5
327	CONCRETE, GYPSUM, PLASTER PRODUCTS	214	50	3.2	21.2	2.3	4.8	13.1	45.6	52.8	98.0	11.4	3.1	35.7
3272	CONCRETE PRODUCTS, NEC. . . . .	93	17	.9	5.7	.7	1.3	3.7	12.7	7.6	20.1	.8	1.0	10.1
3273	READY-MIXED CONCRETE. . . . .	91	19	1.5	10.4	1.0	2.2	6.2	22.6	32.8	55.4	8.2	1.3	15.1
329	MISC. NONMETALLIC MINERAL PRODUCTS	36	19	1.4	10.0	1.1	2.3	7.2	25.3	21.6	45.3	4.5	(NA)	(NA)
3295	MINERALS, GROUND OR TREATED. . . . .	16	7	.3	1.9	.2	.5	1.5	7.0	4.2	10.4	1.0	.4	6.2
3296	MINERAL WOOL. . . . .	3	3	.3	2.5	.2	.5	1.9	7.0	3.5	10.6	.3	.3	3.8
33	PRIMARY METAL INDUSTRIES. . . . .	139	102	44.2	447.4	37.0	72.9	352.2	797.1	1 250.2	2 007.3	51.2	44.6	638.6
331	BLAST FURNACE, BASIC STEEL PROD. . .	32	28	20.5	225.5	17.1	31.9	176.9	412.4	525.8	917.5	(D)	22.5	373.0
3312	BLAST FURNACES AND STEEL MILLS. . . .	15	13	17.8	203.9	14.8	27.1	160.2	375.0	469.0	825.2	25.7	20.9	352.3
3315	STEEL WIRE AND RELATED PRODUCTS. . .	8	6	1.1	8.7	1.0	2.1	6.8	8.8	24.8	32.4	(D)	BB	(D)
332	IRON AND STEEL FOUNDRIES. . . . .	54	47	13.8	109.7	11.8	24.0	87.8	173.8	201.2	374.1	13.8	13.2	114.0
335	NONFERROUS ROLLING AND DRAWING. . .	12	10	5.9	65.4	4.9	10.5	51.7	124.5	342.0	457.0	2.6	5.4	81.9
336	NONFERROUS FOUNDRIES. . . . .	17	8	1.5	21.8	1.3	3.0	17.4	28.5	45.1	73.4	2.5	1.4	15.7
34	FABRICATED METAL PRODUCTS. . . . .	324	142	19.6	149.5	15.6	31.4	107.4	311.8	313.5	620.3	17.4	(NA)	(NA)
341	METAL CANS AND SHIPPING CONTAINERS	5	5	.4	3.6	.4	.7	2.5	6.7	10.0	16.4	.2	(NA)	(NA)
342	CUTLERY, HANDTOOLS AND HARDWARE. .	9	4	.7	3.7	.6	1.3	3.1	7.6	3.3	10.8	(D)	BB	(D)
3429	HARDWARE, NEC. . . . .	5	3	.6	3.1	.6	1.1	2.6	5.9	2.6	8.3	.1	BB	(D)
344	FABRICATED STRUCTURAL METAL PROD. .	181	74	8.0	62.9	6.0	11.9	41.9	131.4	169.0	302.0	7.8	7.7	122.4
3443	FABRICATED PLATEWORK (BOILERS SHOP).	23	16	1.6	14.7	1.2	2.2	16.1	30.1	33.5	66.3	3.4	1.7	54.3
3444	SHEET METALWORK. . . . .	47	9	1.0	8.4	.8	1.5	5.2	20.6	19.0	39.0	.8	.5	6.6
3446	ARCHITECTURAL METALWORK. . . . .	30	5	.4	2.9	.3	.7	2.0	6.5	5.0	11.4	.6	.5	6.2
346	METAL FORGINGS AND STAMPINGS. . . .	17	10	1.4	10.7	1.1	2.4	7.8	21.4	28.2	50.2	.8	(NA)	(NA)
3469	METAL STAMPINGS, NEC. . . . .	13	7	.8	6.0	.7	1.3	4.7	10.9	12.8	24.8	.5	(NA)	(NA)
347	METAL SERVICES, NEC. . . . .	34	11	.6	4.1	.5	1.0	3.1	9.7	4.7	14.4	(D)	.5	3.8
3471	PLATING AND POLISHING. . . . .	20	8	.4	2.3	.3	.6	1.8	4.8	2.0	6.8	(D)	(NA)	(NA)
349	MISC. FABRICATED METAL PRODUCTS. . .	50	23	5.5	43.6	4.5	9.1	33.3	94.4	60.1	148.9	7.0	(NA)	(NA)
3496	MISC. FABRICATED WIRE PRODUCTS. . . .	14	7	.6	4.0	.5	.9	2.7	8.8	11.9	19.8	.7	(NA)	(NA)
35	MACHINERY, EXCEPT ELECTRICAL. . .	339	71	9.0	67.2	6.5	12.9	42.4	140.2	137.8	273.4	10.2	8.6	100.4
353	CONSTRUCTION AND RELATED MACHINERY	22	16	1.7	13.8	1.2	2.4	8.2	29.0	29.2	56.9	2.0	1.8	20.3
3544	SPECIAL DIES, TOOLS, JIGS, FIXTURES. .	20	4	.3	2.3	.2	.5	1.8	4.5	1.6	6.0	.4	AA	(D)
355	SPECIAL INDUSTRY MACHINERY. . . . .	25	11	1.5	11.1	1.1	2.2	7.5	27.6	25.7	52.0	1.4	EE	(D)
356	GENERAL INDUSTRIAL MACHINERY. . . .	28	11	.9	7.4	.6	1.3	5.0	13.9	12.3	25.7	.5	BB	(D)
36	ELECTRIC, ELECTRONIC EQUIPMENT. . .	77	39	13.1	130.8	10.0	19.9	79.4	237.9	123.2	356.4	9.3	(NA)	(NA)
363	HOUSEHOLD APPLIANCES. . . . .	5	6	.7	3.6	.6	1.2	2.8	10.8	13.2	22.5	4.3	(NA)	(NA)
364	ELECT. LIGHTING AND WIRING EQUIP. . .	12	8	1.8	13.6	1.4	2.6	9.7	33.0	16.1	48.5	1.0	1.8	19.8
366	COMMUNICATION EQUIPMENT. . . . .	13	9	7.1	87.9	5.1	10.1	48.9	137.1	47.4	181.4	(D)	EE	(D)
369	MISC. ELECTRICAL EQUIP., SUPPLIES. .	7	#	1.0	5.9	.8	1.6	4.4	15.5	11.0	25.1	.3	CC	(D)
37	TRANSPORTATION EQUIPMENT. . . . .	126	65	18.6	167.7	13.5	26.7	110.0	276.9	260.1	537.0	16.6	(NA)	(NA)
3714	MOTOR VEHICLE PARTS AND ACCESSORIES. .	16	8	1.7	13.6	1.4	3.0	10.3	22.2	35.1	58.9	1.5	EE	(D)
373	SHIP, BOAT BUILDING, REPAIRING. . . .	37	14	3.0	23.3	2.7	4.8	20.3	30.5	20.3	50.7	1.1	2.4	24.1
379	MISC. TRANSPORTATION EQUIPMENT. . .	32	14	1.4	9.0	1.2	2.2	6.4	18.3	30.2	48.6	1.4	(NA)	(NA)
38	INSTRUMENTS AND RELATED PRODUCTS	34	10	1.2	8.3	.9	1.7	5.5	20.5	17.0	35.8	3.5	(NA)	(NA)
39	MISC. MANUFACTURING INDUSTRIES. . .	107	26	3.4	19.9	2.8	5.4	13.6	45.3	41.8	86.1	2.2	2.5	22.2
394	TOYS AND SPORTING GOODS. . . . .	26	6	1.5	8.7	1.3	2.6	6.3	19.7	18.7	37.6	.6	1.1	10.6
399	MISCELLANEOUS MANUFACTURES. . . . .	68	17	1.5	9.1	1.2	2.3	5.9	21.5	19.7	41.2	1.5	.9	6.7
3993	SIGNS AND ADVERTISING DISPLAYS. . . .	29	4	.5	2.8	.4	.7	1.7	7.4	5.3	12.7	.9	.3	3.4
3995	BURIAL CASKETS. . . . .	9	6	.3	1.4	.2	.4	1.0	2.6	3.7	6.2	.2	(NA)	(NA)
	ADMINISTRATIVE AND AUXILIARY. . . .	62	28	4.3	55.1	-	-	-	-	-	-	-	1.1	-

Note: The following symbols indicate employment size range for 1967:

AA less than 250 employees      EE 1,000 to 2,499 employees  
BB 250 to 499 employees      FF 2,500 employees and over  
CC 500 to 999 employees

- Represents zero. (NA) Not available. Because of a revision to this industry or industry group in the 1972 edition of the SIC manual, 1967 census data are not available on a comparable basis. (D) Withhold to avoid disclosing figures for individual companies. (Z) Less than half of the unit of measurement shown.

<sup>1</sup>The total cost of materials and value of shipments for industry groups shown may include extensive duplication arising from shipments between establishments in the same industry classification. (For a more complete explanation, see appendix.)

<sup>2</sup>Includes figures for industry groups which have been withheld from publication in order to (a) avoid disclosing figures for individual companies or (b) permit further checking of figures for smaller industry groups. Additional detail will appear in the final report for this State.



## Appendix A. SCOPE AND COVERAGE

This report is one of a series presenting preliminary information, by State, from the 1972 Census of Manufactures. The data will be superseded in a final report which, in turn, will be included in *Volume III, Area Statistics, 1972 Census of Manufactures*. The final report will include a comprehensive discussion of the concepts and definitions used in the census.

The census of manufactures covers each manufacturing establishment in the United States with one paid employee or more; manufacturing establishments with no employees are excluded. Firms which operated more than one establishment were required to file a separate report for each location. Companies which engaged in distinctly different lines of activity at one location were asked to submit separate reports if the company records permitted such a separation and the activities were of significant size.

This report includes figures for administrative offices, warehouses, garages, or other auxiliary units which service manufacturing establishments.

In the 1972 census, the approximately 120,000 manufacturing establishments with fewer than 10 employees were excused from filing reports. Under special arrangements which safeguarded the confidentiality of both tax and census records, data on payrolls, sales, and industry classification from the administrative records of the Social Security Administration and the Internal Revenue Service were made available to the Census Bureau for use in the 1972 Economic Censuses (retail and wholesale trade, service industries, construction industries, manufactures, and mineral industries). Estimates for data other than payrolls and sales for these small establishments were constructed from industry averages. The effect on industry aggregates is slight in most industries. For manufacturing as a whole, these small establishments account for less than 3 percent of the payrolls and value added.

Establishments are classified by industry in accordance with industry definitions described in the 1972 edition of the Standard Industrial Classification (SIC) Manual. For 1972, the SIC was significantly revised and the comparability with prior year's data for some industries was significantly affected. The comparability at the 2- and 3-digit SIC levels was less affected. The final volumes of the 1972 Census of Manufactures will contain a table relating aggregates based on the 1972 SIC with aggregates derived from classifying establishments according to the 1967 SIC definitions.

As in earlier censuses, a number of small establishments may have been misclassified as to industry. However, such possible misclassifications have significant effect on *none* of the statistics except the number of establishments. As indicated above, report forms were not mailed to very small establishments (fewer than 10 employees). The industry classifications for these establishments were assigned on the basis of brief descriptions of the general activity of the establishment. Where the description is incomplete or there are relatively fine lines of demarcation among industries or between manufacturing and nonmanufacturing activity, the code assigned to an establishment could differ from that which would have been assigned on the basis of more complete product information. Therefore, the total establishment count for individual industries should be viewed as an approximation rather than a precise measurement. The counts for establishments with 20 employees or more are more reliable than the total number of establishments.

More detailed figures for this State will appear in the final census reports. Final reports will also include a comprehensive discussion of such concepts as "industry" and "establishment," as well as the various statistical items such as "employment," "value of shipments," and "value added." Similar preliminary and final reports will be issued for other States during the coming months. A series of preliminary summary reports showing U.S. totals for each manufacturing industry and for each State are being issued. Final industry reports and final area reports will be published during 1974.

Order forms describing the individual reports and listing their prices may be obtained from any U.S. Department of Commerce district office or from the Publications Distribution Section, Social and Economic Statistics Administration, Washington, D.C. 20233.

The 1972 Census of Manufactures is the 29th census of manufacturing establishments in the United States. For 1972, it was conducted jointly with the censuses of mineral industries, construction industries, retail trade, wholesale trade, and selected services under authority of Title 13 of the United States Code. Title 13 specifies that a census of manufactures be conducted every 5 years and, as amended, to cover years ending in "2" and "7". Title 13 also authorizes an annual sample survey of manufacturing establishments in interim years.



## Appendix B. EXPLANATION OF TERMS

*(For a more complete discussion of these terms and the method of compiling the Census of Manufactures, see the "Introduction" to the 1967 Census of Manufactures, Volume III).*

**All Employees**—All full-time and part-time employees on the payrolls of operating manufacturing establishments for any part of the pay period ending nearest the 12th of the months specified on the report form. Included are all persons on paid sick leave, paid holidays, and paid vacations during these pay periods. Officers of corporations are included as employees; proprietors and partners of unincorporated firms are excluded. The "all employee" number is the average number of production workers for the midmonth payroll period of March, May, August, and November plus the number of nonproduction employees in mid-March.

**Number of Production Workers**—Workers (up through the working foreman level) engaged in fabricating, processing, assembling, inspecting, receiving, packing, warehousing, shipping (but not delivering), and maintenance, repair, janitorial, and watchman services, product development, auxiliary production for plant's own use (e.g., powerplant), recordkeeping, and other closely associated services. Proprietors and partners are excluded.

**Payroll**—This item includes all forms of compensation such as salaries, wages, commissions, dismissal pay, bonuses, vacation and sick leave pay, and compensation in kind, prior to such deductions as employees' Social Security contributions, withholding taxes, group insurance, union dues, and savings bonds. The total includes salaries of officers of these establishments, if a corporation; it excludes payments to the proprietor or partners, if an unincorporated concern. Respondents were told that in reporting they could follow the definition of payrolls used for calculating the Federal withholding tax.

**Man-Hours of Production Workers**—This total relates to production-worker man-hours worked or paid for at the plant including actual overtime hours (not straight-time equivalent hours). It excludes hours paid for vacation, holidays, or sick leave when the employee was not at the plant.

**Cost of Materials**—The term "Cost of Materials" refers to charges actually paid or payable for items consumed or put into production during the year, including freight and other direct charges incurred by the establishment in acquiring these materials. It includes the cost of materials or fuel consumed regardless of

whether these items were purchased by the establishment from other companies, transferred to it from other establishments of the same company, or withdrawn from inventory during the year. The establishment was requested to value materials transferred from other parts of the company at its approximate market value, not at cost of production. The important components of this cost item are (a) all raw materials, semifinished goods, parts, components, containers, scrap, and supplies put into production or used as operating supplies and for repair and maintenance during the year; (b) electric energy purchased; (c) fuels consumed for heat, power, or the generation of electricity; (d) work done by others on materials or parts furnished by manufacturing establishments (contract work); and (e) products bought and resold in the same condition.

**Value of Shipments**—The value of shipments is the received or receivable net selling value, f.o.b. plant (exclusive of freight and taxes), of all products shipped, both primary and secondary, as well as all miscellaneous receipts such as receipts for contract work performed for others, installation and repair, sales of scrap, and sale of products bought and resold without further processing. Included are all items made by the establishment or for it under contract from materials owned by it whether sold, transferred to other plants of the same company, or shipped on consignment. The net selling value of products made in one plant on a contract basis from materials owned by another was reported by the plant providing the materials.

In the case of multiunit companies, the manufacturer was requested to report the value of products transferred to other establishments of the same company at full economic value; i.e., to include not only the direct costs of production but also a reasonable proportion of "all other costs" (including company overhead) and profit.

**Duplication in Cost of Materials and Value of Products**—The aggregate cost of materials and value-of-shipments figures for industry groups and for all manufacturing industries may include large amounts of duplication since the products of some industries are used as materials by others. With some important exceptions, such as motor vehicles and parts, this duplication is not significant within individual industries but arises from the addition of the totals of related industries in successive stages of the production of a finished manufactured product. Examples are the addition of flour mills to bakeries in the food group and the addition of pulp mills to paper mills in the paper and allied products group of industries. Esti-



mates of this duplication indicate that the value of manufactured products exclusive of such duplication—the value of finished manufactures—approximates two-thirds of the total value of products.

Prior to 1962, the Bureau of the Census did not publish figures for cost of materials or value of shipments if they contained significant duplication. Effective with the 1962 annual survey these figures were shown at all industry levels for the United States to meet the requests for their use in studies in which the presence of an indeterminate amount of duplication is not a limiting factor. However, they are appropriately footnoted. Effective with the 1964 annual survey, these industry group totals are also shown at the State, standard metropolitan statistical area, and large-county level.

Even where there is no significant amount of duplication, value-of-shipments figures are deficient as measures of the relative economic importance of individual manufacturing industries or geographic areas because of the wide variation in ratio of materials, labor, and other processing costs to value of shipments among industries.

**Value Added by Manufacture**—This measure of manufacturing activity is derived by subtracting the cost of materials, supplies, containers, fuel, purchased electricity, and cost of resales contract work from the value of shipments for products manufactured plus resales and receipts for services rendered. The result of this calculation is adjusted by the net change in finished goods and work-in-process inventories between the beginning and end of the year. (In the few industries that report value of production rather than value of shipments, only changes in work-in-process inventories are used to adjust value added. In the shipbuilding and repairing industry, no inventory adjustment is made.)

"Value added" avoids the duplication in the value of shipments figure which results from the use of products of some establishments as materials by others. Value added is considered to be the best value measure available for comparing the relative economic importance of manufacturing among industries and geographic areas.

**Expenditures for Plant and Equipment**—Manufacturing establishments in operation and establishments under construction but not yet in operation, were asked to report their expenditures for (a) permanent additions and major alterations to the manufacturing establishment, and (b) new machinery and equipment used for replacement purposes and additions to plant capacity if they are of the type for which depreciation accounts are ordinarily maintained.

These totals exclude expenditures for new facilities and equipment leased from nonmanufacturing concerns; new facilities owned by the Federal Government but operated under contract by private companies; and plant and equipment furnished to the manufacturer by communities and nonprofit organizations. Expenditures for used plant and equipment (although reported in the census), expenditures for land, and cost of maintenance and repairs charged as current operating expense are also omitted from the figures for new capital expenditures.

**Central Administrative Offices and Auxiliary Units**—In the 1972 census as in previous years, respondents were asked to file separate reports for central administrative offices or auxiliary units which were (1) at different locations from the establishments served or, (2) at the same location as one of these establishments but were not operated as an integral part thereof and served two or more establishments. The functions of employees in central administrative offices include general company policy determination, planning and management (that is, company purchasing, accounting, general engineering, direction of company personnel matters, and legal and patent matters). Auxiliaries are storage facilities, garages, repair shops, purchasing offices, sales promotion offices, and research laboratories serving the plants or central management of the company.

**Standard Metropolitan Statistical Areas**—Standard metropolitan statistical areas (SMSA) are integrated economic and social units with a large volume of daily travel and communication between the central city and outlying parts of the area.<sup>1</sup> Each area (except in New England) consists of one whole county or more. An area may contain not only highly industrialized counties but also adjoining counties which, though primarily residential in character, contribute significantly to the industrial counties' labor force and are socially and economically integrated with the central city. These areas are defined by the Federal Committee on Standard Metropolitan Statistical Areas of the Office of Management and Budget for general-purpose use throughout the Federal Government in presenting economic and social data. In the New England States, similar intergration criteria are applied in defining

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<sup>1</sup> Each standard metropolitan statistical area must include either (1) a city with 50,000 or more inhabitants, or (2) a city having a population of at least 25,000 which (a) with the addition of the population of contiguous places has a population density of at least 1,000 persons per square mile; (b) constitutes, for general economic and social purposes, a single community with a combined population of at least 50,000; and (c) includes a total population of at least 75,000 in the county or counties in which the city and contiguous places are located.

SMSA's on a city and town basis because towns rather than counties are regarded as the significant unit in this region of the country.

The requirement that each SMSA consist of county units (except in New England) sometimes results in the inclusion in an area of considerable amount of territory which would not ordinarily be considered "metropolitan," much less "industrial." It is recognized that metropolitan areas could be more accurately defined in terms of smaller area segments such as minor civil

divisions, but the usefulness of areas so defined would be limited by the fact that many types of economic and social data are available only on a county basis.

Each SMSA is designated by the name of the principal city of the area. In addition to the name of the principal city, the area title may include one or two additional city names.

The data for SMSA's which changed definition since the 1967 census have not been retabulated on the new basis for years prior to 1972.







## PRELIMINARY REPORT

**1972 CENSUS OF  
MANUFACTURES**

## AREA SERIES

72(P)-S2

U. S. DEPARTMENT OF COMMERCE • Social and Economic Statistics Administration • BUREAU OF THE CENSUS

ed April 1974

**Alaska**

Value added by manufacturing in 1972 in the State of Alaska amounted to \$180 million, a 38-percent increase from 1967.

This report presents preliminary results from the 1972 Census of Manufactures for the State, its Standard Metropolitan Statistical Area, and its Census Divisions.

Data are provided for industry groups within the State. Historical data, back to 1958, are included for the State as a whole, and 1967 figures on employment and value

added are provided for the smaller areas.

The figures in this report have been subjected to only preliminary review and must be regarded as approximations of the final census figures. No adjustments have been made in the value figures for changes in price level.

For an explanation of the terms used in the tables, see the appendix at the end of this report.

TABLE 1. General Statistics for the State: 1972 and Earlier Years

(See appendix, Explanation of Terms)

Year	Establishments		All employees <sup>1</sup>		Production workers			Value added by manufacture	Cost of materials <sup>2</sup>	Value of shipments <sup>2</sup>	Capital expendi- tures, new
	Total	With 20 employees or more	Number	Payroll	Number	Man-hours	Wages				
	(number)	(number)	(1,000)	(million dollars)	(1,000)	(millions)	(million dollars)				
	ALASKA										
1972 Census .....	337	91	8.0	83.6	6.4	12.4	62.6	179.7	219.6	403.4	22.3
1971 ASM .....	(NA)	(NA)	7.7	80.1	6.0	11.6	59.0	197.7	237.6	429.5	18.5
1970 ASM .....	(NA)	(NA)	7.9	78.0	6.3	11.8	59.9	174.9	210.8	382.9	23.4
1969 ASM .....	(NA)	(NA)	6.3	54.8	5.1	9.7	40.6	133.8	177.8	314.6	15.3
1968 ASM .....	(NA)	(NA)	6.5	51.1	5.4	10.0	38.2	133.7	172.5	309.8	14.3
1967 Census .....	323	95	7.6	55.6	6.3	11.7	42.7	130.4	147.8	278.2	14.7
1966 ASM .....	(NA)	(NA)	7.1	51.8	5.9	11.6	42.2	131.1	155.3	284.8	12.2
1965 ASM .....	(NA)	(NA)	6.3	45.3	5.2	10.5	36.4	112.2	130.9	242.3	12.6
1964 ASM .....	(NA)	(NA)	5.3	39.2	4.3	8.4	29.8	87.9	115.8	203.9	6.1
1963 Census .....	303	73	5.8	39.7	4.7	9.2	30.5	85.0	(NA)	(NA)	14.5
1962 ASM .....	(NA)	(NA)	5.4	34.9	4.4	8.5	27.0	91.5	(NA)	(NA)	6.4
1961 ASM .....	(NA)	(NA)	5.3	32.7	4.3	8.4	25.2	89.2	(NA)	(NA)	5.3
1960 ASM .....	(NA)	(NA)	5.6	35.3	4.5	9.1	27.9	71.9	(NA)	(NA)	3.7
1959 ASM .....	(NA)	(NA)	4.5	25.6	3.6	7.0	20.0	63.5	(NA)	(NA)	(D)
1958 Census .....	246	69	4.8	25.7	3.9	7.3	19.9	64.6	(NA)	(NA)	3.3

Note: "ASM" data are based on a representative sample of manufacturing establishments canvassed in the Annual Survey of Manufactures. These estimates may differ from the results of a complete canvass of all manufacturing establishments. The standard errors associated with these estimates are published in the annual survey of manufactures volumes for this period. For comparative purposes, the 1972 ASM estimate for the State of Texas was 7 thousand employees, and \$201 million in value added with corresponding standard error of estimate of 7 and 8.

(NA) Not available. (D) Withheld to avoid disclosing figures for individual companies.

<sup>1</sup>Includes employment and payroll at central administrative offices and auxiliary units. (For a definition of these units, see appendix.)

<sup>2</sup>The total cost of materials and value of shipments may include extensive duplication arising from shipments between establishments in the same industry classification. (For a more complete explanation, see appendix.)

TABLE 2. General Statistics for the State, Standard Metropolitan Statistical Area, and Divisions: 1972 and 1967

(See appendix, Explanation of Terms)

State, standard metropolitan statistical areas, and counties <sup>1</sup>	1972											1967	
	Establishments		All employees <sup>2</sup>		Production workers			Value added by manufac- ture	Cost of materials <sup>3</sup>	Value of shipments <sup>3</sup>	Capital ex- penditures, new	All employees	Value added by manufac- ture
	Total	With 20 employees or more	Number	Payroll	Number	Man-hours	Wages						
	(number)	(number)	(1,000)	(million dollars)	(1,000)	(million)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(1,000)	(million dollars)
ALASKA, TOTAL. . . . .	337	91	8.0	83.6	6.4	12.4	62.6	179.7	219.6	403.4	22.3	7.6	130.4
STANDARD METROPOLITAN STATISTICAL AREAS <sup>4</sup>													
ANCHORAGE. . . . .	99	13	1.2	12.3	.7	1.3	6.1	20.5	21.3	41.6	2.0	1.0	15.7
CENSUS DIVISIONS <sup>5</sup>													
ALEUTIAN ISLANDS . . . . .	7	5	.4	3.6	.3	.5	2.6	6.5	10.4	17.1	.4	.9	12.8
ANCHORAGE. . . . .	99	13	1.2	12.3	.7	1.3	6.1	20.5	21.3	41.6	2.0	1.0	15.7
KENAI-COOK INLET . . . . .	32	7	.5	5.5	.4	.8	4.0	24.2	42.8	66.6	1.5	.2	6.6
KETCHIKAN. . . . .	38	12	1.6	16.4	1.4	2.5	13.5	30.2	36.3	67.9	8.8	1.6	28.1
KODIAK . . . . .	21	14	.9	6.6	.8	1.6	5.4	15.3	15.7	31.0	1.4	.8	9.3
WRANGELL-PETERSBURG. . . . .	30	13	.7	6.8	.6	1.2	5.9	14.4	37.9	52.0	1.0	.7	13.0

<sup>1</sup>Some counties were withheld from publication in order to (a) avoid disclosing figures for individual companies or (b) permit further checking of the figures for smaller counties. Additional detail will appear in the final report for this State.

<sup>2</sup>Includes employment and payroll at central administrative offices and auxiliary units. (For a definition of these units, see appendix.)

<sup>3</sup>The total cost of materials and value of shipments may include extensive duplication arising from shipments between establishments in the same industry classification. (For a more complete explanation, see appendix.)

<sup>4</sup>The standard metropolitan statistical area in this State is defined as follows:

ANCHORAGE SMSA: Coextensive with Anchorage Census Division, AK.

<sup>5</sup>The Bureau of Census, in conjunction with the State of Alaska, has modified the major divisions of the State used for statistical reporting purposes since 1967. Most of the census divisions for 1972 are not directly comparable to those used in 1967.

TABLE 3. General Statistics for the State, by Industry Groups and Industries: 1972 and 1967

(See appendix, Explanation of Terms)

Code	Industry	1972										1967		
		Establishments		All employees		Production workers			Value added by manufacture	Cost of materials <sup>1</sup>	Value of shipments <sup>1</sup>	Capital expenditures, new	All employees	Value added by manufacture
		Total	With 20 employees or more	Number	Payroll	Number	Man-hours	Wages						
		(number)	(number)	(1,000)	(million dollars)	(1,000)	(million)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(1,000)	(million dollars)	
	ALL INDUSTRIES, TOTAL <sup>2</sup> . . . .	337	91	8.0	83.6	6.4	12.4	62.6	179.7	219.6	403.4	22.3	7.6	130.4
20	FOOD AND KINDRED PRODUCTS. . . .	109	50	3.3	24.7	2.7	5.2	19.9	57.0	71.2	128.1	4.4	3.8	52.6
209	MISC FOODS AND KINDRED PRODUCTS .	83	45	2.9	21.2	2.5	4.9	18.2	50.3	61.4	111.8	3.8	(NA)	(NA)
2091	CANNED AND CURED SEAFOODS. . . . .	52	25	1.6	13.3	1.5	2.9	11.0	28.8	36.6	65.4	2.2	2.4	36.8
2092	FRESH OR FROZEN PACKAGED FISH. . . .	27	20	1.3	8.5	1.1	2.0	7.1	21.1	24.3	45.4	1.4	.8	8.7
24	LUMBER AND WOOD PRODUCTS . . . .	79	24	1.9	19.7	1.7	3.2	17.5	34.7	54.7	89.2	2.5	(NA)	(NA)
27	PRINTING AND PUBLISHING. . . . .	48	6	.6	5.4	.3	.5	2.7	9.0	3.1	12.7	.3	.5	6.4

(NA) Not available. Because of a revision to this industry or industry group in the 1972 edition of the SIC manual, 1967 census data are not available on a comparable basis.

<sup>1</sup>The total cost of materials and value of shipments for industry groups shown may include extensive duplication arising from shipments between establishments in the same industry classification. (For a more complete explanation, see appendix.)

<sup>2</sup>Includes figures for industry groups which have been withheld from publication in order to (a) avoid disclosing figures for individual companies or (b) permit further checking of figures for smaller industry groups. Additional detail will appear in the final report for this State.



## Appendix A. SCOPE AND COVERAGE

This report is one of a series presenting preliminary information, by State, from the 1972 Census of Manufactures. The data will be superseded in a final report which, in turn, will be included in *Volume III, Area Statistics, 1972 Census of Manufactures*. The final report will include a comprehensive discussion of the concepts and definitions used in the census.

The census of manufactures covers each manufacturing establishment in the United States with one paid employee or more; manufacturing establishments with no employees are excluded. Firms which operated more than one establishment were required to file a separate report for each location. Companies which engaged in distinctly different lines of activity at one location were asked to submit separate reports if the company records permitted such a separation and the activities were of significant size.

This report includes figures for administrative offices, warehouses, garages, or other auxiliary units which service manufacturing establishments.

In the 1972 census, the approximately 120,000 manufacturing establishments with fewer than 10 employees were excused from filing reports. Under special arrangements which safeguarded the confidentiality of both tax and census records, data on payrolls, sales, and industry classification from the administrative records of the Social Security Administration and the Internal Revenue Service were made available to the Census Bureau for use in the 1972 Economic Censuses (retail and wholesale trade, service industries, construction industries, manufactures, and mineral industries). Estimates for data other than payrolls and sales for these small establishments were constructed from industry averages. The effect on industry aggregates is slight in most industries. For manufacturing as a whole, these small establishments account for less than 3 percent of the payrolls and value added.

Establishments are classified by industry in accordance with industry definitions described in the 1972 edition of the Standard Industrial Classification (SIC) Manual. For 1972, the SIC was significantly revised and the comparability with prior year's data for some industries was significantly affected. The comparability at the 2- and 3-digit SIC levels was less affected. The final volumes of the 1972 Census of Manufactures will contain a table relating aggregates based on the 1972 SIC with aggregates derived from classifying establishments according to the 1967 SIC definitions.

As in earlier censuses, a number of small establishments may have been misclassified as to industry. However, such possible misclassifications have significant effect on *none* of the statistics except the number of establishments. As indicated above, report forms were not mailed to very small establishments (fewer than 10 employees). The industry classifications for these establishments were assigned on the basis of brief descriptions of the general activity of the establishment. Where the description is incomplete or there are relatively fine lines of demarcation among industries or between manufacturing and nonmanufacturing activity, the code assigned to an establishment could differ from that which would have been assigned on the basis of more complete product information. Therefore, the total establishment count for individual industries should be viewed as an approximation rather than a precise measurement. The counts for establishments with 20 employees or more are more reliable than the total number of establishments.

More detailed figures for this State will appear in the final census reports. Final reports will also include a comprehensive discussion of such concepts as "industry" and "establishment," as well as the various statistical items such as "employment," "value of shipments," and "value added." Similar preliminary and final reports will be issued for other States during the coming months. A series of preliminary summary reports showing U.S. totals for each manufacturing industry and for each State are being issued. Final industry reports and final area reports will be published during 1974.

Order forms describing the individual reports and listing their prices may be obtained from any U.S. Department of Commerce district office or from the Publications Distribution Section, Social and Economic Statistics Administration, Washington, D.C. 20233.

The 1972 Census of Manufactures is the 29th census of manufacturing establishments in the United States. For 1972, it was conducted jointly with the censuses of mineral industries, construction industries, retail trade, wholesale trade, and selected services under authority of Title 13 of the United States Code. Title 13 specifies that a census of manufactures be conducted every 5 years and, as amended, to cover years ending in "2" and "7". Title 13 also authorizes an annual sample survey of manufacturing establishments in interim years.



## Appendix B. EXPLANATION OF TERMS

*(For a more complete discussion of these terms and the method of compiling the Census of Manufactures, see the "Introduction" to the 1967 Census of Manufactures, Volume III).*

**All Employees**—All full-time and part-time employees on the payrolls of operating manufacturing establishments for any part of the pay period ending nearest the 12th of the months specified on the report form. Included are all persons on paid sick leave, paid holidays, and paid vacations during these pay periods. Officers of corporations are included as employees; proprietors and partners of unincorporated firms are excluded. The "all employee" number is the average number of production workers for the midmonth payroll period of March, May, August, and November plus the number of nonproduction employees in mid-March.

**Number of Production Workers**—Workers (up through the working foreman level) engaged in fabricating, processing, assembling, inspecting, receiving, packing, warehousing, shipping (but not delivering), and maintenance, repair, janitorial, and watchman services, product development, auxiliary production for plant's own use (e.g., powerplant), recordkeeping, and other closely associated services. Proprietors and partners are excluded.

**Payroll**—This item includes all forms of compensation such as salaries, wages, commissions, dismissal pay, bonuses, vacation and sick leave pay, and compensation in kind, prior to such deductions as employees' Social Security contributions, withholding taxes, group insurance, union dues, and savings bonds. The total includes salaries of officers of these establishments, if a corporation; it excludes payments to the proprietor or partners, if an unincorporated concern. Respondents were told that in reporting they could follow the definition of payrolls used for calculating the Federal withholding tax.

**Man-Hours of Production Workers**—This total relates to production-worker man-hours worked or paid for at the plant including actual overtime hours (not straight-time equivalent hours). It excludes hours paid for vacation, holidays, or sick leave when the employee was not at the plant.

**Cost of Materials**—The term "Cost of Materials" refers to charges actually paid or payable for items consumed or put into production during the year, including freight and other direct charges incurred by the establishment in acquiring these materials. It includes the cost of materials or fuel consumed regardless of

whether these items were purchased by the establishment from other companies, transferred to it from other establishments of the same company, or withdrawn from inventory during the year. The establishment was requested to value materials transferred from other parts of the company at its approximate market value, not at cost of production. The important components of this cost item are (a) all raw materials, semifinished goods, parts, components, containers, scrap, and supplies put into production or used as operating supplies and for repair and maintenance during the year; (b) electric energy purchased; (c) fuels consumed for heat, power, or the generation of electricity; (d) work done by others on materials or parts furnished by manufacturing establishments (contract work); and (e) products bought and resold in the same condition.

**Value of Shipments**—The value of shipments is the received or receivable net selling value, f.o.b. plant (exclusive of freight and taxes), of all products shipped, both primary and secondary, as well as all miscellaneous receipts such as receipts for contract work performed for others, installation and repair, sales of scrap, and sale of products bought and resold without further processing. Included are all items made by the establishment or for it under contract from materials owned by it whether sold, transferred to other plants of the same company, or shipped on consignment. The net selling value of products made in one plant on a contract basis from materials owned by another was reported by the plant providing the materials.

In the case of multiunit companies, the manufacturer was requested to report the value of products transferred to other establishments of the same company at full economic value; i.e., to include not only the direct costs of production but also a reasonable proportion of "all other costs" (including company overhead) and profit.

**Duplication in Cost of Materials and Value of Products**—The aggregate cost of materials and value-of-shipments figures for industry groups and for all manufacturing industries may include large amounts of duplication since the products of some industries are used as materials by others. With some important exceptions, such as motor vehicles and parts, this duplication is not significant within individual industries but arises from the addition of the totals of related industries in successive stages of the production of a finished manufactured product. Examples are the addition of flour mills to bakeries in the food group and the addition of pulp mills to paper mills in the paper and allied products group of industries. Esti-



mates of this duplication indicate that the value of manufactured products exclusive of such duplication—the value of finished manufactures—approximates two-thirds of the total value of products.

Prior to 1962, the Bureau of the Census did not publish figures for cost of materials or value of shipments if they contained significant duplication. Effective with the 1962 annual survey these figures were shown at all industry levels for the United States to meet the requests for their use in studies in which the presence of an indeterminate amount of duplication is not a limiting factor. However, they are appropriately footnoted. Effective with the 1964 annual survey, these industry group totals are also shown at the State, standard metropolitan statistical area, and large-county level.

Even where there is no significant amount of duplication, value-of-shipments figures are deficient as measures of the relative economic importance of individual manufacturing industries or geographic areas because of the wide variation in ratio of materials, labor, and other processing costs to value of shipments among industries.

**Value Added by Manufacture**—This measure of manufacturing activity is derived by subtracting the cost of materials, supplies, containers, fuel, purchased electricity, and cost of resales contract work from the value of shipments for products manufactured plus resales and receipts for services rendered. The result of this calculation is adjusted by the net change in finished goods and work-in-process inventories between the beginning and end of the year. (In the few industries that report value of production rather than value of shipments, only changes in work-in-process inventories are used to adjust value added. In the shipbuilding and repairing industry, no inventory adjustment is made.)

“Value added” avoids the duplication in the value of shipments figure which results from the use of products of some establishments as materials by others. Value added is considered to be the best value measure available for comparing the relative economic importance of manufacturing among industries and geographic areas.

**Expenditures for Plant and Equipment**—Manufacturing establishments in operation and establishments under construction but not yet in operation, were asked to report their expenditures for (a) permanent additions and major alterations to the manufacturing establishment, and (b) new machinery and equipment used for replacement purposes and additions to plant capacity if they are of the type for which depreciation accounts are ordinarily maintained.

These totals exclude expenditures for new facilities and equipment leased from nonmanufacturing concerns; new facilities owned by the Federal Government but operated under contract by private companies; and plant and equipment furnished to the manufacturer by communities and nonprofit organizations. Expenditures for used plant and equipment (although reported in the census), expenditures for land, and cost of maintenance and repairs charged as current operating expense are also omitted from the figures for new capital expenditures.

**Central Administrative Offices and Auxiliary Units**—In the 1972 census as in previous years, respondents were asked to file separate reports for central administrative offices or auxiliary units which were (1) at different locations from the establishments served or, (2) at the same location as one of these establishments but were not operated as an integral part thereof and served two or more establishments. The functions of employees in central administrative offices include general company policy determination, planning and management (that is, company purchasing, accounting, general engineering, direction of company personnel matters, and legal and patent matters). Auxiliaries are storage facilities, garages, repair shops, purchasing offices, sales promotion offices, and research laboratories serving the plants or central management of the company.

**Standard Metropolitan Statistical Areas**—Standard metropolitan statistical areas (SMSA) are integrated economic and social units with a large volume of daily travel and communication between the central city and outlying parts of the area.<sup>1</sup> Each area (except in New England) consists of one whole county or more. An area may contain not only highly industrialized counties but also adjoining counties which, though primarily residential in character, contribute significantly to the industrial counties' labor force and are socially and economically integrated with the central city. These areas are defined by the Federal Committee on Standard Metropolitan Statistical Areas of the Office of Management and Budget for general-purpose use throughout the Federal Government in presenting economic and social data. In the New England States, similar intergration criteria are applied in defining

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<sup>1</sup> Each standard metropolitan statistical area must include either (1) a city with 50,000 or more inhabitants, or (2) a city having a population of at least 25,000 which (a) with the addition of the population of contiguous places has a population density of at least 1,000 persons per square mile; (b) constitutes, for general economic and social purposes, a single community with a combined population of at least 50,000; and (c) includes a total population of at least 75,000 in the county or counties in which the city and contiguous places are located.

SMSA's on a city and town basis because towns rather than counties are regarded as the significant unit in this region of the country.

The requirement that each SMSA consist of county units (except in New England) sometimes results in the inclusion in an area of considerable amount of territory which would not ordinarily be considered "metropolitan," much less "industrial." It is recognized that metropolitan areas could be more accurately defined in terms of smaller area segments such as minor civil

divisions, but the usefulness of areas so defined would be limited by the fact that many types of economic and social data are available only on a county basis.

Each SMSA is designated by the name of the principal city of the area. In addition to the name of the principal city, the area title may include one or two additional city names.

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**1972 CENSUS OF  
MANUFACTURES**

AREA SERIES

C72(P)-S3

ed February 1974

U. S. DEPARTMENT OF COMMERCE • Social and Economic Statistics Administration • BUREAU OF THE CENSUS

**Arizona**

Value added by manufacturing in 1972 in the State of Arizona amounted to \$1,917 million, a 38-percent increase from 1971 and a 93-percent increase from 1967.

This report presents preliminary results from the 1972 Census of Manufactures for the State, its Standard Metropolitan Statistical Areas and its counties.

Data are provided for industry groups within the State. Historical data, back to 1958, are included for the State as a whole,

and 1967 figures on employment and value added are provided for the smaller areas.

The figures in this report have been subjected to only preliminary review and must be regarded as approximations of the final census figures. No adjustments have been made in the value figures for changes in price level.

For an explanation of the terms used in the tables, see the appendix at the end of this report.

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(See appendix, Explanation of Terms)

Year	Establishments		All employees <sup>1</sup>		Production workers			Value added by manufacture	Cost of materials <sup>2</sup>	Value of shipments <sup>2</sup>	Capital expenditures, new
	Total	With 20 employees or more	Number	Payroll	Number	Man-hours	Wages				
	(number)	(number)	(1,000)	(million dollars)	(1,000)	(millions)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(million dollars)
ARIZONA											
1972 Census .....	2,012	599	94.8	870.5	62.3	122.2	485.8	1,916.9	2,260.5	4,104.2	199.4
1971 ASM .....	(NA)	(NA)	82.6	721.1	52.4	102.3	387.3	1,384.6	1,775.7	3,180.7	142.2
1970 ASM .....	(NA)	(NA)	88.8	713.7	54.7	110.1	374.0	1,436.8	1,797.8	3,175.3	116.5
1969 ASM .....	(NA)	(NA)	91.2	696.1	59.2	117.5	375.6	1,275.1	1,663.4	2,922.6	118.4
1968 ASM .....	(NA)	(NA)	82.0	601.1	54.6	109.6	330.1	1,129.7	1,267.8	2,419.0	107.2
1967 Census .....	1,630	424	76.8	543.2	50.8	101.8	308.6	995.3	1,003.9	2,003.7	109.9
1966 ASM .....	(NA)	(NA)	71.0	498.0	47.4	97.7	287.0	926.5	1,077.5	1,960.4	78.5
1965 ASM .....	(NA)	(NA)	61.1	407.1	40.7	83.8	234.3	717.9	980.7	1,686.5	52.0
1964 ASM .....	(NA)	(NA)	59.8	374.8	39.9	81.3	221.5	654.3	876.6	1,518.8	39.2
1963 Census .....	1,518	339	56.9	347.5	38.6	77.5	210.5	627.1	(NA)	(NA)	49.5
1962 ASM .....	(NA)	(NA)	50.3	304.9	34.9	71.5	194.3	501.9	(NA)	(NA)	39.2
1961 ASM .....	(NA)	(NA)	48.6	285.7	34.1	69.3	184.1	473.4	(NA)	(NA)	67.2
1960 ASM .....	(NA)	(NA)	47.5	268.6	34.4	69.8	176.3	475.1	(NA)	(NA)	34.7
1959 ASM .....	(NA)	(NA)	44.7	244.6	33.5	68.3	169.5	402.1	(NA)	(NA)	34.3
1958 Census .....	1,158	257	40.6	213.3	30.0	61.4	148.3	360.2	(NA)	(NA)	27.7

Note: "ASM" data are based on a representative sample of manufacturing establishments canvassed in the Annual Survey of Manufactures. These estimates may differ from the results of a complete canvass of all manufacturing establishments. The standard errors associated with these estimates are published in the annual survey of manufactures volumes for this period. For comparative purposes, the 1972 ASM estimate for the State of Arizona was 88 thousand employees and \$1,812 million in value added with corresponding standard error of estimate of 2 and 1.

(NA) Not available.

<sup>1</sup>Includes employment and payroll at central administrative offices and auxiliary units. (For a definition of these units, see appendix.)

<sup>2</sup>The total cost of materials and value of shipments may include extensive duplication arising from shipments between establishments in the same industry classification. (For a more complete explanation, see appendix.)

TABLE 2. General Statistics for the State, Standard Metropolitan Statistical Areas, and Counties: 1972 and 1967

(See appendix, Explanation of Terms)

State, standard metropolitan statistical areas, and counties <sup>1</sup>	1972										1967		
	Establishments		All employees <sup>2</sup>		Production workers			Value added by manu- facture	Cost of materials <sup>3</sup>	Value of shipments <sup>3</sup>	Capital expendi- tures, new	All employees	Value added by manu- facture
	Total	With 20 employees or more	Number	Payroll	Number	Man-hours	Wages						
	(number)	(number)	(1,000)	(million dollars)	(1,000)	(million)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(1,000)	(million dollars)
ARIZONA, TOTAL . . . . .	2 012	599	94.8	870.5	62.3	122.2	485.8	1 916.9	2 260.5	4 104.2	199.4	76.8	995.3
STANDARD METROPOLITAN STATISTICAL AREAS <sup>4</sup>													
PHOENIX . . . . .	1 340	406	72.1	676.7	46.3	91.2	367.7	1 392.8	1 224.9	2 582.2	81.9	59.3	773.3
TUCSON . . . . .	292	79	9.5	89.1	5.4	10.4	43.0	174.8	195.5	359.9	38.0	8.5	96.4
COUNTIES													
COCHISE . . . . .	38	12	1.6	13.6	1.2	2.6	10.0	31.1	161.4	192.2	7.0	1.0	10.5
COCONINO . . . . .	45	16	1.5	10.1	1.2	2.2	7.4	27.5	19.5	44.9	3.1	1.2	12.0
GILA . . . . .	20	9	1.6	16.2	1.3	2.6	12.4	55.1	217.8	277.4	25.2	1.4	13.3
MARICOPA . . . . .	1 340	406	72.1	676.7	46.3	91.2	367.7	1 392.8	1 224.9	2 582.2	81.9	59.3	773.3
MOHAVE . . . . .	30	5	.7	5.6	.6	1.2	4.2	14.2	27.5	40.6	1.9	(D)	(D)
NAVAJO . . . . .	40	11	1.2	8.6	1.0	1.8	6.3	23.0	23.9	46.4	(D)	1.2	16.6
PIMA . . . . .	292	79	9.5	89.1	5.4	10.4	43.0	174.8	195.5	359.9	38.0	8.5	96.4
YAVAPAI . . . . .	54	13	1.1	7.4	1.0	1.7	5.9	20.3	20.9	41.0	3.6	.7	10.8
YUMA . . . . .	47	11	1.1	6.9	.8	1.6	4.7	11.4	14.9	25.0	1.3	.7	6.8

(D) Withheld to avoid disclosing figures for individual companies.

<sup>1</sup>Some counties were withheld from publication in order to (a) avoid disclosing figures for individual companies or (b) permit further checking of the figures for smaller counties. Additional detail will appear in the final report for this State.<sup>2</sup>Includes employment and payroll at central administrative offices and auxiliary units. (For a definition of these units, see appendix.)<sup>3</sup>The total cost of materials and value of shipments may include extensive duplication arising from shipments between establishments in the same industry classification. (For a more complete explanation, see appendix.)<sup>4</sup>The standard metropolitan statistical areas in this State are defined as follows:

PHOENIX SMSA: Coextensive with Maricopa County, AZ.

TUCSON SMSA: Coextensive with Pima County, AZ.

TABLE 3. General Statistics for the State, by Industry Groups and Industries: 1972 and 1967

(See appendix, Explanation of Terms)

Code	Industry	1972										1967		
		Establishments		All employees		Production workers			Value added by manufacture	Cost of materials <sup>1</sup>	Value of shipments <sup>1</sup>	Capital expenditures, new	All employees	Value added by manufacture
		Total	With 20 employees or more	Number	Payroll	Number	Man-hours	Wages						
		(number)	(number)	(1,000)	(million dollars)	(1,000)	(million)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(1,000)	(million dollars)
	ALL INDUSTRIES, TOTAL <sup>2</sup> . . . . .	2 012	599	94.8	870.5	62.3	122.2	485.8	1 916.9	2 260.5	4 104.2	199.4	76.8	995.3
20	FOOD AND KINDRED PRODUCTS . . . . .	184	82	7.1	61.1	4.0	7.9	31.6	155.2	464.5	617.3	10.0	6.4	82.4
201	MEAT PRODUCTS . . . . .	26	11	1.4	14.6	1.1	2.1	10.3	31.6	268.3	298.4	2.3	.8	8.7
2011	MEATPACKING PLANTS . . . . .	17	10	1.3	13.9	1.0	2.0	9.7	29.6	262.3	290.5	2.3	.7	8.5
202	DAIRY PRODUCTS . . . . .	20	8	1.0	9.4	.5	.8	4.3	37.6	69.7	106.9	1.7	1.2	16.1
2024	FLUID MILK . . . . .	12	7	.9	8.7	.4	.7	3.9	36.4	66.7	102.9	1.5	1.2	14.1
204	GRAIN MILL PRODUCTS . . . . .	17	6	.3	2.4	.2	.4	1.2	6.4	26.3	32.7	.6	.7	7.5
205	BAKERY PRODUCTS . . . . .	26	11	1.4	13.9	.8	1.4	6.4	26.8	18.2	45.0	1.0	1.2	15.9
208	BEVERAGES . . . . .	29	21	1.4	10.7	.5	1.1	2.9	25.9	33.7	59.5	2.8	1.1	17.3
2084	BOTTLED AND CANNED SOFT DRINKS . . . . .	24	19	1.2	9.4	.4	.9	2.2	21.5	27.7	49.0	2.7	.8	(D)
209	MISC. FOODS AND KINDRED PRODUCTS . . . . .	41	14	.6	3.1	.4	.6	1.7	8.7	6.2	14.9	.4	.8	12.4
2099	FOOD PREPARATIONS, NEC . . . . .	26	10	.4	1.8	.3	.3	1.0	5.7	5.1	10.8	.3	.3	2.5
23	APPAREL, OTHER TEXTILE PRODUCTS . . . . .	84	32	5.3	24.7	4.7	8.5	19.9	40.2	36.6	73.4	1.1	4.1	22.8
232	WOMEN'S AND BOYS' FURNISHINGS . . . . .	17	10	2.8	12.2	2.5	4.5	10.0	22.4	25.0	44.4	.6	1.2	11.1
233	WOMEN'S, AND MISSES' OUTERWEAR . . . . .	12	5	.6	2.8	.5	1.0	2.5	5.1	1.3	6.4	(2)	.7	4.5
239	MISC. FABRICATED TEXTILE PRODUCTS . . . . .	51	10	.7	3.1	.6	.9	2.5	4.8	6.6	11.3	.2	.8	(D)
2391	CURTAINS AND DRAPERIES . . . . .	27	7	.4	2.0	.4	.5	1.6	3.0	3.3	6.3	.1	.2	1.3
24	LUMBER AND WOOD PRODUCTS . . . . .	175	54	4.6	33.0	4.0	7.7	26.1	64.1	88.8	150.2	5.2	1.7	28.5
2411	LOGGING CAMPS, LOGGING CONTRACTORS . . . . .	35	5	.3	2.3	.3	.6	2.1	4.7	2.2	7.0	1.6	.4	4.0
242	SAWMILLS AND PLANING MILLS . . . . .	32	13	1.5	9.5	1.3	2.6	8.1	24.1	26.3	49.3	1.6	2.0	16.7
2421	SAWMILLS AND PLANING MILLS, GENERAL . . . . .	26	12	1.4	9.4	1.3	2.5	8.1	23.9	26.1	48.8	(D)	2.0	16.6
243	MILLWORK, PLYWOOD, STRUC. MEMBERS . . . . .	74	20	1.7	13.7	1.4	2.7	10.2	22.7	37.1	58.8	1.0	.7	11.8
2431	MILLWORK . . . . .	34	13	.9	7.0	.7	1.3	4.8	12.9	23.7	35.8	.6	.7	7.0
2434	WOOD KITCHEN CABINETS . . . . .	22	3	.6	4.5	.5	1.1	3.7	6.2	5.9	11.9	.3	(NA)	(NA)
245	WOOD BUILDINGS AND MOBILE HOMES . . . . .	17	3	.8	5.5	.7	1.3	4.2	9.3	18.2	27.3	.8	(NA)	(NA)
25	FURNITURE AND FIXTURES . . . . .	87	21	1.4	9.6	1.2	2.3	7.1	17.0	15.4	32.4	.8	.6	11.7
251	HOUSEHOLD FURNITURE . . . . .	54	14	1.0	6.4	.9	1.7	4.7	11.1	11.2	22.2	.6	.6	11.7
2511	WOOD HOUSEHOLD FURNITURE . . . . .	27	5	.5	2.8	.4	.8	2.2	4.5	3.8	8.2	.5	.2	11.7
2515	MATTRESSES AND BEDSPRINGS . . . . .	21	5	.3	2.0	.2	.4	1.2	3.7	4.7	8.3	.1	.3	2.5
254	PARTITIONS AND FIXTURES . . . . .	17	3	.3	2.4	.2	.4	1.8	4.6	3.4	8.0	(D)	(NA)	(NA)
2541	WOOD PARTITIONS AND FIXTURES . . . . .	17	3	.3	2.4	.2	.4	1.8	4.6	3.4	8.0	(D)	(NA)	(NA)

See footnotes at end of table.



TABLE 3. General Statistics for the State, by Industry Groups and Industries: 1972 and 1967—Continued

(See appendix, Explanation of Terms)

Code	Industry	1972											1967	
		Establishments		All employees		Production workers			Value added by manufacture	Cost of materials <sup>1</sup>	Value of shipments <sup>1</sup>	Capital expenditures, new	All employees	Value added by manufacture
		Total	With 20 employees or more	Number	Payroll	Number	Man-hours	Wages						
		(number)	(number)	(1,000)	(million dollars)	(1,000)	(million)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(1,000)	(million dollars)
26	PAPER AND ALLIED PRODUCTS. . . .	1e	7	.9	8.4	.7	1.3	5.9	23.8	24.7	48.3	4.5	CC	(1)
27	PRINTING AND PUBLISHING. . . . .	304	57	6.6	53.1	3.9	7.2	31.4	122.3	49.1	171.3	8.8	4.6	55.2
2711	NEWSPAPERS. . . . .	61	22	3.7	28.9	1.7	3.0	14.3	77.5	25.8	103.3	6.5	3.4	35.6
275	COMMERCIAL PRINTING. . . . .	165	16	1.8	15.9	1.4	2.7	11.7	28.4	16.6	45.0	1.8	1.1	11.5
2751	COMMERCIAL PRINTING, LETTERPRESS. .	82	5	.6	4.3	.5	.8	3.3	8.0	4.7	12.7	.5	CC	(1)
2752	COMMERCIAL PRINTING, LITHOGRAPHIC. .	73	11	1.2	11.4	.9	1.8	8.2	20.0	11.8	31.8	1.2	BB	(1)
28	CHEMICALS AND ALLIED PRODUCTS. .	57	14	1.7	12.6	1.1	2.2	7.5	60.7	41.8	98.1	8.9	1.0	16.2
289	MISCELLANEOUS CHEMICAL PRODUCTS. .	1e	3	.4	3.3	.3	.6	2.1	7.4	13.2	20.3	.5	.2	3.4
30	RUBBER AND MISC. PLASTICS PROD. .	56	20	1.7	10.7	1.4	2.7	7.3	22.5	16.5	38.7	(D)	.6	4.2
3079	MISCELLANEOUS PLASTICS PRODUCTS. .	4e	17	1.3	8.8	1.1	2.1	5.8	19.2	14.5	33.7	1.7	BB	(D)
32	STONE, CLAY, AND GLASS PRODUCTS. .	162	52	4.4	48.0	3.5	7.1	37.1	104.1	72.3	175.8	29.5	2.5	39.4
327	CONCRETE, GYPSUM, PLASTER PRODUCTS	117	42	3.6	40.2	2.7	5.8	30.7	80.8	55.4	135.9	14.7	2.0	28.8
3271	CONCRETE BLOCK AND BRICK. . . . .	14	6	.5	6.4	.4	.9	5.1	15.1	13.1	28.3	1.2	.3	4.5
3272	CONCRETE PRODUCTS, NEC. . . . .	40	11	.9	9.6	.7	1.5	6.9	18.0	10.9	28.2	1.7	.5	6.7
3273	READY-MIXED CONCRETE. . . . .	58	22	1.9	22.5	1.5	3.1	17.5	43.0	28.4	71.6	11.5	1.1	15.6
33	PRIMARY METAL INDUSTRIES. . . . .	48	28	7.6	79.2	6.3	12.9	59.7	310.3	876.8	1 164.3	84.0	4.6	77.3
333	PRIMARY NONFERROUS METALS. . . . .	10	9	3.3	36.4	2.9	6.2	28.5	182.3	697.5	859.1	75.2	EE	(1)
3331	PRIMARY COPPER. . . . .	10	9	3.3	36.4	2.9	6.2	28.5	182.3	697.5	859.1	75.2	EE	(1)
335	NONFERROUS ROLLING AND DRAWING. .	9	8	3.2	34.0	2.5	4.9	24.3	112.7	168.4	279.1	7.9	EE	(D)
34	FABRICATED METAL PRODUCTS. . . . .	162	49	4.2	35.9	3.2	6.0	25.5	78.1	68.4	143.6	3.4	3.7	45.3
344	FABRICATED STRUCTURAL METAL PROD. .	92	30	2.8	24.2	2.1	3.8	17.8	54.3	51.9	104.7	2.6	2.6	31.1
3441	FABRICATED STRUCTURAL METAL PRODUCTS	18	9	1.2	11.0	.9	1.7	8.5	30.5	22.8	51.5	.8	1.1	12.1
3443	FABRICATED PLATEWORK (BOILER SHOP). .	3	1	.3	3.0	.3	.4	2.3	3.4	7.0	11.1	(D)	(NA)	(NA)
3444	SHEET METALWORK. . . . .	32	12	.5	4.4	.4	.8	3.2	9.6	10.4	19.8	.3	.3	3.0
3449	MISCELLANEOUS METAL WORK. . . . .	3	4	.4	4.2	.3	.6	2.8	7.7	9.1	16.7	1.0	BB	(1)
347	METAL SERVICES, NEC. . . . .	22	5	.3	2.1	.2	.5	1.5	3.5	1.3	4.8	.2	.4	3.2
3471	PLATING AND POLISHING. . . . .	16	5	.3	2.0	.2	.4	1.4	3.3	1.1	4.3	.2	.3	2.5
349	MISC. FABRICATED METAL PRODUCTS. .	26	6	.4	2.7	.3	.6	1.8	5.8	4.2	10.0	.3	.5	7.4
35	MACHINERY, EXCEPT ELECTRICAL. .	264	55	10.1	99.0	5.7	11.9	44.5	309.1	110.5	398.7	9.3	13.6	199.0
354	METALWORKING MACHINERY. . . . .	32	3	.3	2.7	.2	.5	2.0	4.4	1.3	5.6	(D)	.4	4.8
359	MISC. MACHINERY, EXCEPT ELECTRICAL	164	33	2.0	18.5	1.6	3.2	13.6	28.2	10.3	38.3	.9	(NA)	(NA)
36	ELECTRIC, ELECTRONIC EQUIPMENT. .	103	37	22.9	206.5	13.6	26.0	92.7	335.5	175.7	512.8	21.2	19.0	234.2
364	ELECT. LIGHTING AND WIRING EQUIP. .	4	1	.3	2.5	.2	.3	1.3	6.0	2.6	8.7	.2	(NA)	(NA)
365	RADIO AND TV RECEIVING EQUIPMENT. .	6	3	.7	4.0	.6	1.3	3.4	7.3	1.0	8.3	(D)	(NA)	(NA)
366	COMMUNICATION EQUIPMENT. . . . .	23	13	5.3	59.5	2.7	5.5	25.9	96.4	48.5	158.2	2.5	FF	(1)
3662	RADIO AND TV COMMUNICATION EQUIPMENT	23	13	5.3	59.5	2.7	5.5	25.9	96.4	48.5	158.2	2.5	FF	(1)
367	ELECTRONIC COMPONENTS AND ACCESS. .	46	16	16.2	136.6	9.7	18.2	59.6	218.4	114.0	321.2	15.5	13.0	147.3
37	TRANSPORTATION EQUIPMENT. . . . .	90	26	8.9	106.4	6.2	12.8	70.8	169.4	160.1	318.3	4.4	1.6	16.3
371	MOTOR VEHICLES AND EQUIPMENT. . . .	25	3	.3	2.0	.2	.4	1.3	3.8	4.6	8.3	.2	.2	1.3
38	INSTRUMENTS AND RELATED PRODUCTS	44	16	3.4	36.7	1.4	3.0	10.6	71.5	28.9	98.5	2.5	FF	(1)
39	MISC. MANUFACTURING INDUSTRIES. .	96	16	1.4	9.1	1.1	2.2	6.2	19.5	17.9	36.7	.7	.7	6.3
394	TOYS AND SPORTING GOODS. . . . .	14	2	.4	2.6	.3	.6	1.6	7.0	5.1	11.8	.2	(NA)	(NA)
399	MISCELLANEOUS MANUFACTURES. . . . .	52	8	.5	3.5	.4	.7	2.2	6.8	3.8	10.6	.3	.3	3.1
60	ADMINISTRATIVE AND AUXILIARY. . . .	47	22	2.2	32.9	-	-	-	-	-	-	-	1.1	-

Note: The following symbols indicate employment size range for 1967:

AA less than 250 employees

EE 1,000 to 2,499 employees

BB 250 to 499 employees

FF 2,500 employees and over

CC 500 to 999 employees

- Represents zero. (NA) Not available. (D) Withheld to avoid disclosing figures for individual companies. (Z) Less than half of the unit of measurement shown.

<sup>1</sup>The total cost of materials and value of shipments for industry groups shown may include extensive duplication arising from shipments between establishments in the same industry classification. (For a more complete explanation, see appendix.)<sup>2</sup>Includes figures for industry groups which have been withheld from publication in order to (a) avoid disclosing figures for individual companies or (b) permit further checking of figures for smaller industry groups. Additional detail will appear in the final report for this State.

## Appendix A. SCOPE AND COVERAGE

This report is one of a series presenting preliminary information, by State, from the 1972 Census of Manufactures. The data will be superseded in a final report which, in turn, will be included in *Volume III, Area Statistics, 1972 Census of Manufactures*. The final report will include a comprehensive discussion of the concepts and definitions used in the census.

The census of manufactures covers each manufacturing establishment in the United States with one paid employee or more; manufacturing establishments with no employees are excluded. Firms which operated more than one establishment were required to file a separate report for each location. Companies which engaged in distinctly different lines of activity at one location were asked to submit separate reports if the company records permitted such a separation and the activities were of significant size.

This report includes figures for administrative offices, warehouses, garages, or other auxiliary units which service manufacturing establishments.

In the 1972 census, the approximately 120,000 manufacturing establishments with fewer than 10 employees were excused from filing reports. Under special arrangements which safeguarded the confidentiality of both tax and census records, data on payrolls, sales, and industry classification from the administrative records of the Social Security Administration and the Internal Revenue Service were made available to the Census Bureau for use in the 1972 Economic Censuses (retail and wholesale trade, service industries, construction industries, manufactures, and mineral industries). Estimates for data other than payrolls and sales for these small establishments were constructed from industry averages. The effect on industry aggregates is slight in most industries. For manufacturing as a whole, these small establishments account for less than 3 percent of the payrolls and value added.

Establishments are classified by industry in accordance with industry definitions described in the 1972 edition of the Standard Industrial Classification (SIC) Manual. For 1972, the SIC was significantly revised and the comparability with prior year's data for some industries was significantly affected. The comparability at the 2- and 3-digit SIC levels was less affected. The final volumes of the 1972 Census of Manufactures will contain a table relating aggregates based on the 1972 SIC with aggregates derived from classifying establishments according to the 1967 SIC definitions.

As in earlier censuses, a number of small establishments may have been misclassified as to industry. However, such possible misclassifications have significant effect on *none* of the statistics except the number of establishments. As indicated above, report forms were not mailed to very small establishments (fewer than 10 employees). The industry classifications for these establishments were assigned on the basis of brief descriptions of the general activity of the establishment. Where the description is incomplete or there are relatively fine lines of demarcation among industries or between manufacturing and nonmanufacturing activity, the code assigned to an establishment could differ from that which would have been assigned on the basis of more complete product information. Therefore, the total establishment count for individual industries should be viewed as an approximation rather than a precise measurement. The counts for establishments with 20 employees or more are more reliable than the total number of establishments.

More detailed figures for this State will appear in the final census reports. Final reports will also include a comprehensive discussion of such concepts as "industry" and "establishment," as well as the various statistical items such as "employment," "value of shipments," and "value added." Similar preliminary and final reports will be issued for other States during the coming months. A series of preliminary summary reports showing U.S. totals for each manufacturing industry and for each State are being issued. Final industry reports and final area reports will be published during 1974.

Order forms describing the individual reports and listing their prices may be obtained from any U.S. Department of Commerce district office or from the Publications Distribution Section, Social and Economic Statistics Administration, Washington, D.C. 20233.

The 1972 Census of Manufactures is the 29th census of manufacturing establishments in the United States. For 1972, it was conducted jointly with the censuses of mineral industries, construction industries, retail trade, wholesale trade, and selected services under authority of Title 13 of the United States Code. Title 13 specifies that a census of manufactures be conducted every 5 years and, as amended, to cover years ending in "2" and "7". Title 13 also authorizes an annual sample survey of manufacturing establishments in interim years.



## Appendix B. EXPLANATION OF TERMS

*(For a more complete discussion of these terms and the method of compiling the Census of Manufactures, see the "Introduction" to the 1967 Census of Manufactures, Volume III).*

**All Employees**—All full-time and part-time employees on the payrolls of operating manufacturing establishments for any part of the pay period ending nearest the 12th of the months specified on the report form. Included are all persons on paid sick leave, paid holidays, and paid vacations during these pay periods. Officers of corporations are included as employees; proprietors and partners of unincorporated firms are excluded. The "all employee" number is the average number of production workers for the midmonth payroll period of March, May, August, and November plus the number of nonproduction employees in mid-March.

**Number of Production Workers**—Workers (up through the working foreman level) engaged in fabricating, processing, assembling, inspecting, receiving, packing, warehousing, shipping (but not delivering), and maintenance, repair, janitorial, and watchman services, product development, auxiliary production for plant's own use (e.g., powerplant), recordkeeping, and other closely associated services. Proprietors and partners are excluded.

**Payroll**—This item includes all forms of compensation such as salaries, wages, commissions, dismissal pay, bonuses, vacation and sick leave pay, and compensation in kind, prior to such deductions as employees' Social Security contributions, withholding taxes, group insurance, union dues, and savings bonds. The total includes salaries of officers of these establishments, if a corporation; it excludes payments to the proprietor or partners, if an unincorporated concern. Respondents were told that in reporting they could follow the definition of payrolls used for calculating the Federal withholding tax.

**Man-Hours of Production Workers**—This total relates to production-worker man-hours worked or paid for at the plant including actual overtime hours (not straight-time equivalent hours). It excludes hours paid for vacation, holidays, or sick leave when the employee was not at the plant.

**Cost of Materials**—The term "Cost of Materials" refers to charges actually paid or payable for items consumed or put into production during the year, including freight and other direct charges incurred by the establishment in acquiring these materials. It includes the cost of materials or fuel consumed regardless of

whether these items were purchased by the establishment from other companies, transferred to it from other establishments of the same company, or withdrawn from inventory during the year. The establishment was requested to value materials transferred from other parts of the company at its approximate market value, not at cost of production. The important components of this cost item are (a) all raw materials, semifinished goods, parts, components, containers, scrap, and supplies put into production or used as operating supplies and for repair and maintenance during the year; (b) electric energy purchased; (c) fuels consumed for heat, power, or the generation of electricity; (d) work done by others on materials or parts furnished by manufacturing establishments (contract work); and (e) products bought and resold in the same condition.

**Value of Shipments**—The value of shipments is the received or receivable net selling value, f.o.b. plant (exclusive of freight and taxes), of all products shipped, both primary and secondary, as well as all miscellaneous receipts such as receipts for contract work performed for others, installation and repair, sales of scrap, and sale of products bought and resold without further processing. Included are all items made by the establishment or for it under contract from materials owned by it whether sold, transferred to other plants of the same company, or shipped on consignment. The net selling value of products made in one plant on a contract basis from materials owned by another was reported by the plant providing the materials.

In the case of multiunit companies, the manufacturer was requested to report the value of products transferred to other establishments of the same company at full economic value; i.e., to include not only the direct costs of production but also a reasonable proportion of "all other costs" (including company overhead) and profit.

**Duplication in Cost of Materials and Value of Products**—The aggregate cost of materials and value-of-shipments figures for industry groups and for all manufacturing industries may include large amounts of duplication since the products of some industries are used as materials by others. With some important exceptions, such as motor vehicles and parts, this duplication is not significant within individual industries but arises from the addition of the totals of related industries in successive stages of the production of a finished manufactured product. Examples are the addition of flour mills to bakeries in the food group and the addition of pulp mills to paper mills in the paper and allied products group of industries. Esti-



mates of this duplication indicate that the value of manufactured products exclusive of such duplication—the value of finished manufactures—approximates two-thirds of the total value of products.

Prior to 1962, the Bureau of the Census did not publish figures for cost of materials or value of shipments if they contained significant duplication. Effective with the 1962 annual survey these figures were shown at all industry levels for the United States to meet the requests for their use in studies in which the presence of an indeterminate amount of duplication is not a limiting factor. However, they are appropriately footnoted. Effective with the 1964 annual survey, these industry group totals are also shown at the State, standard metropolitan statistical area, and large-county level.

Even where there is no significant amount of duplication, value-of-shipments figures are deficient as measures of the relative economic importance of individual manufacturing industries or geographic areas because of the wide variation in ratio of materials, labor, and other processing costs to value of shipments among industries.

**Value Added by Manufacture**—This measure of manufacturing activity is derived by subtracting the cost of materials, supplies, containers, fuel, purchased electricity, and cost of resales contract work from the value of shipments for products manufactured plus resales and receipts for services rendered. The result of this calculation is adjusted by the net change in finished goods and work-in-process inventories between the beginning and end of the year. (In the few industries that report value of production rather than value of shipments, only changes in work-in-process inventories are used to adjust value added. In the shipbuilding and repairing industry, no inventory adjustment is made.)

“Value added” avoids the duplication in the value of shipments figure which results from the use of products of some establishments as materials by others. Value added is considered to be the best value measure available for comparing the relative economic importance of manufacturing among industries and geographic areas.

**Expenditures for Plant and Equipment**—Manufacturing establishments in operation and establishments under construction but not yet in operation, were asked to report their expenditures for (a) permanent additions and major alterations to the manufacturing establishment, and (b) new machinery and equipment used for replacement purposes and additions to plant capacity if they are of the type for which depreciation accounts are ordinarily maintained.

These totals exclude expenditures for new facilities and equipment leased from nonmanufacturing concerns; new facilities owned by the Federal Government but operated under contract by private companies; and plant and equipment furnished to the manufacturer by communities and nonprofit organizations. Expenditures for used plant and equipment (although reported in the census), expenditures for land, and cost of maintenance and repairs charged as current operating expense are also omitted from the figures for new capital expenditures.

**Central Administrative Offices and Auxiliary Units**—In the 1972 census as in previous years, respondents were asked to file separate reports for central administrative offices or auxiliary units which were (1) at different locations from the establishments served or, (2) at the same location as one of these establishments but were not operated as an integral part thereof and served two or more establishments. The functions of employees in central administrative offices include general company policy determination, planning and management (that is, company purchasing, accounting, general engineering, direction of company personnel matters, and legal and patent matters). Auxiliaries are storage facilities, garages, repair shops, purchasing offices, sales promotion offices, and research laboratories serving the plants or central management of the company.

**Standard Metropolitan Statistical Areas**—Standard metropolitan statistical areas (SMSA) are integrated economic and social units with a large volume of daily travel and communication between the central city and outlying parts of the area.<sup>1</sup> Each area (except in New England) consists of one whole county or more. An area may contain not only highly industrialized counties but also adjoining counties which, though primarily residential in character, contribute significantly to the industrial counties' labor force and are socially and economically integrated with the central city. These areas are defined by the Federal Committee on Standard Metropolitan Statistical Areas of the Office of Management and Budget for general-purpose use throughout the Federal Government in presenting economic and social data. In the New England States, similar intergration criteria are applied in defining

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<sup>1</sup> Each standard metropolitan statistical area must include either (1) a city with 50,000 or more inhabitants, or (2) a city having a population of at least 25,000 which (a) with the addition of the population of contiguous places has a population density of at least 1,000 persons per square mile; (b) constitutes, for general economic and social purposes, a single community with a combined population of at least 50,000; and (c) includes a total population of at least 75,000 in the county or counties in which the city and contiguous places are located.



SMSA's on a city and town basis because towns rather than counties are regarded as the significant unit in this region of the country.

The requirement that each SMSA consist of county units (except in New England) sometimes results in the inclusion in an area of considerable amount of territory which would not ordinarily be considered "metropolitan," much less "industrial." It is recognized that metropolitan areas could be more accurately defined in terms of smaller area segments such as minor civil

divisions, but the usefulness of areas so defined would be limited by the fact that many types of economic and social data are available only on a county basis.

Each SMSA is designated by the name of the principal city of the area. In addition to the name of the principal city, the area title may include one or two additional city names.

The data for SMSA's which changed definition since the 1967 census have not been retabulated on the new basis for years prior to 1972.

**U.S. DEPARTMENT OF COMMERCE**  
**Social and Economic Statistics Administration**  
BUREAU OF THE CENSUS  
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**1972 CENSUS OF  
MANUFACTURES**

## AREA SERIES

C72(P)-S4

U. S. DEPARTMENT OF COMMERCE • Social and Economic Statistics Administration • BUREAU OF THE CENSUS

Issued April 1974

**Arkansas**

Value added by manufacturing in 1972 in the State of Arkansas amounted to \$2,767 million, a 14-percent increase from 1971 and a 78-percent increase from 1967.

This report presents preliminary results from the 1972 Census of Manufactures for the State, its Standard Metropolitan Statistical Areas, and its counties.

Data are provided for industry groups within the State. Historical data, back to 1958, are included for the State as a whole,

and 1967 figures on employment and value added are provided for the smaller areas.

The figures in this report have been subjected to only preliminary review and must be regarded as approximations of the final census figures. No adjustments have been made in the value figures for changes in price level.

For an explanation of the terms used in the tables, see the appendix at the end of this report.

**TABLE 1. General Statistics for the State: 1972 and Earlier Years**

(See appendix, Explanation of Terms)

Year	Establishments		All employees <sup>1</sup>		Production workers			Value added by manufacture	Cost of materials <sup>2</sup>	Value of shipments <sup>2</sup>	Capital expenditures, new
	Total	With 20 employees or more	Number	Payroll	Number	Man-hours	Wages				
	(number)	(number)	(1,000)	(million dollars)	(1,000)	(millions)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(million dollars)
ARKANSAS											
1972 Census .....	2,864	1,033	180.0	1,148.0	149.0	297.0	850.5	2,767.1	3,685.1	6,400.8	216.2
1971 ASM .....	(NA)	(NA)	165.1	979.9	134.9	268.7	714.9	2,420.0	3,261.7	5,625.9	171.7
1970 ASM .....	(NA)	(NA)	160.5	893.1	132.8	264.2	656.9	2,147.7	2,942.7	5,054.9	210.8
1969 ASM .....	(NA)	(NA)	161.1	837.0	135.1	266.0	625.1	2,025.9	2,823.1	4,777.8	180.9
1968 ASM .....	(NA)	(NA)	148.2	745.2	124.0	245.7	557.9	1,800.6	2,564.0	4,327.4	145.2
1967 Census .....	2,911	927	143.6	665.6	120.7	239.6	497.3	1,557.7	2,354.2	3,877.1	172.6
1966 ASM .....	(NA)	(NA)	136.0	591.6	114.9	234.7	451.2	1,409.8	2,181.2	3,553.8	121.7
1965 ASM .....	(NA)	(NA)	128.9	533.3	109.4	221.3	405.0	1,221.4	1,938.5	3,150.3	103.9
1964 ASM .....	(NA)	(NA)	119.3	481.7	100.2	205.1	367.9	1,088.6	1,716.3	2,777.5	73.6
1963 Census .....	2,859	840	113.6	439.6	95.6	191.8	331.7	960.9	(NA)	(NA)	73.4
1962 ASM .....	(NA)	(NA)	116.7	436.9	97.7	193.5	333.0	895.0	(NA)	(NA)	75.4
1961 ASM .....	(NA)	(NA)	108.1	389.3	89.4	175.6	284.5	812.4	(NA)	(NA)	70.4
1960 ASM .....	(NA)	(NA)	105.0	369.7	87.8	172.7	271.9	760.3	(NA)	(NA)	70.4
1959 ASM .....	(NA)	(NA)	98.8	340.6	83.0	164.5	256.3	719.3	(NA)	(NA)	53.7
1958 Census .....	2,589	666	88.7	292.7	74.4	144.7	220.9	591.7	(NA)	(NA)	48.2

Note: "ASM" data are based on a representative sample of manufacturing establishments canvassed in the Annual Survey of Manufactures. These estimates may differ from the results of a complete canvass of all manufacturing establishments. The standard errors associated with these estimates are published in the annual survey of manufactures volumes for this period. For comparative purposes, the 1972 ASM estimate for the State of Arkansas was 180 thousand employees, and \$2,916 million in value added with corresponding standard error of estimate of 2 and 1.

(NA) Not available.

<sup>1</sup>Includes employment and payroll at central administrative offices and auxiliary units. (For a definition of these units, see appendix.)

<sup>2</sup>The total cost of materials and value of shipments may include extensive duplication arising from shipments between establishments in the same industry classification. (For a more complete explanation, see appendix.)

TABLE 2. General Statistics for the State, Standard Metropolitan Statistical Areas, and Counties: 1972 and 1967

(See appendix, Explanation of Terms)

State, standard metropolitan statistical areas, and counties <sup>1</sup>	1972											1967	
	Establishments		All employees <sup>2</sup>		Production workers			Value added by manufacture	Cost of materials <sup>3</sup>	Value of shipments <sup>3</sup>	Capital expenditures, new	All employees	Value added by manufacture
	Total (number)	With 20 employees or more (number)	Number (1,000)	Payroll (million dollars)	Number (1,000)	Man-hours (million)	Wages (million dollars)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(1,000)	(million dollars)
ARKANSAS, TOTAL . . . . .	2 864	1 033	180.0	1 148.0	149.0	297.0	850.5	2 767.1	3 685.1	6 400.8	216.2	143.6	1 557.7
STANDARD METROPOLITAN STATISTICAL AREAS <sup>4</sup>													
FAYETTEVILLE-SPRINGDALE . . . . .	202	78	16.0	92.9	13.7	27.1	71.8	232.2	361.4	569.6	13.7	12.3	126.8
FORT SMITH . . . . .	283	114	18.6	118.1	15.2	29.5	85.6	275.6	336.4	616.9	11.5	14.1	164.2
PORTION IN ARKANSAS . . . . .	225	105	17.5	112.0	14.3	27.8	81.0	258.8	325.1	588.8	10.8	13.6	158.9
PORTION IN OKLAHOMA . . . . .	58	9	1.1	6.1	.9	1.7	4.6	16.8	11.3	28.1	.7	.5	5.3
LITTLE ROCK-NORTH LITTLE ROCK . . . . .	390	156	28.3	197.9	22.2	44.0	137.9	434.6	524.8	955.3	31.0	24.2	266.9
PINE BLUFF . . . . .	80	40	6.3	48.3	4.9	10.2	35.1	149.3	198.3	346.4	6.1	5.7	92.4
TEXARKANA-TX TEXARKANA AR. . . . .	106	39	9.2	67.7	6.3	11.7	40.2	161.5	166.1	318.7	7.3	10.7	51.2
MEMPHIS . . . . .	1 036	451	64.2	525.7	46.6	95.0	341.0	1 346.4	1 783.2	3 159.7	82.5	58.9	813.4
PORTION IN TENNESSEE . . . . .	954	411	59.8	495.4	43.4	88.6	322.3	1 271.4	1 705.7	3 016.5	74.6	56.0	783.6
PORTION IN MISSISSIPPI . . . . .	36	19	2.4	16.5	1.8	3.6	10.3	37.3	42.0	76.5	2.6	1.6	17.0
PORTION IN ARKANSAS . . . . .	46	21	2.0	13.8	1.4	2.8	8.4	37.7	35.5	66.7	5.3	1.3	12.8
COUNTIES													
ARKANSAS . . . . .	34	12	2.2	12.3	1.7	3.9	9.0	38.2	191.9	223.2	3.2	1.6	24.6
BAXTER . . . . .	24	4	1.8	8.4	1.5	2.8	7.1	21.4	5.3	28.4	(D)	(D)	(D)
BENTON . . . . .	106	39	7.1	42.2	6.0	11.7	31.6	112.6	122.1	235.3	6.8	5.4	58.3
BOONE . . . . .	41	15	1.9	9.9	1.6	3.1	7.3	27.0	21.0	47.2	1.6	1.8	12.9
BRADLEY . . . . .	30	5	1.7	10.5	1.6	3.6	9.0	26.2	21.8	48.9	2.1	(D)	(D)
CARROLL . . . . .	12	5	.7	3.3	.7	1.3	2.9	4.6	15.0	20.0	.3	1.0	6.3
CHICOT . . . . .	11	6	1.0	4.1	.9	1.6	3.6	7.2	5.6	12.7	.6	.7	4.6
CLARK . . . . .	61	14	2.5	16.8	2.0	4.1	12.8	38.8	45.7	84.7	2.9	1.9	22.2
CLAY . . . . .	20	6	1.3	6.7	1.2	2.3	6.1	12.4	8.2	21.2	.4	1.2	9.0
CLEBURNE . . . . .	12	2	.4	1.5	.4	.6	1.3	2.8	1.7	4.4	.3	.4	1.8
CLEVELAND . . . . .	16	5	.3	1.6	.3	.6	1.3	4.5	3.7	8.1	.3	.3	2.2
COLUMBIA . . . . .	58	17	2.2	14.8	1.8	3.7	10.5	56.2	39.8	92.2	2.3	2.6	25.1
CONWAY . . . . .	17	7	2.1	13.4	1.8	3.8	10.8	30.6	32.4	63.0	2.0	1.6	14.0
CRAIGHEAD . . . . .	72	31	5.1	32.4	4.1	8.6	23.6	64.3	79.7	141.4	5.5	3.6	36.4
CRAWFORD . . . . .	29	10	.8	4.7	.7	1.2	3.5	9.6	23.2	31.9	.5	.8	4.2
CRITTENDEN . . . . .	46	21	2.0	13.8	1.4	2.8	8.4	37.7	35.5	66.7	5.3	1.3	12.8
CROSS . . . . .	16	7	1.8	10.9	1.7	3.4	9.3	22.9	55.8	79.0	(D)	1.2	12.5
DALLAS . . . . .	61	13	1.3	8.0	1.1	2.4	6.4	21.8	20.6	42.2	1.6	1.1	7.8
DESHA . . . . .	20	8	1.4	6.3	1.2	2.5	5.5	15.9	17.0	32.0	.7	.7	4.7
DREW . . . . .	34	13	2.0	12.3	1.7	3.5	9.2	34.4	62.5	95.8	6.3	1.2	17.2
FRANKLIN . . . . .	14	4	.5	2.0	.4	.6	1.5	4.3	13.5	17.9	.6	.4	3.8
FULTON . . . . .	8	1	.6	2.0	.5	1.1	1.9	3.0	.4	3.5	(Z)	(Z)	.4
GARLAND . . . . .	82	30	4.6	31.6	3.5	7.2	20.1	51.2	67.5	116.8	5.1	3.4	24.6
GRANT . . . . .	30	10	1.3	7.6	1.1	2.1	6.1	25.6	23.1	47.8	1.0	.9	8.1
GREENE . . . . .	29	10	4.1	23.4	3.5	6.6	17.9	74.3	40.6	112.0	4.9	1.8	16.7
HEMPSTEAD . . . . .	36	18	1.7	9.7	1.4	2.6	6.7	21.6	25.6	46.0	3.8	1.1	8.3
HOT SPRING . . . . .	45	15	2.4	21.5	2.0	4.0	16.6	42.9	67.9	111.4	3.6	(D)	(D)
INDEPENDENCE . . . . .	36	17	2.7	16.2	2.4	4.4	11.7	38.2	90.4	128.7	3.2	2.5	19.2
JACKSON . . . . .	30	13	1.7	13.2	1.4	2.9	9.3	14.8	39.5	53.9	(D)	1.1	10.8
JEFFERSON . . . . .	80	40	7.3	48.3	4.9	10.2	35.1	149.3	198.3	346.4	6.1	5.7	92.4
JOHNSON . . . . .	23	12	1.3	7.3	1.2	2.4	6.1	14.1	19.7	33.5	2.4	.9	6.0
LAFAYETTE . . . . .	12	7	.8	4.5	.7	1.4	3.1	7.9	15.6	23.4	.6	.5	3.5
LAWRENCE . . . . .	23	7	.6	3.2	.6	.9	2.4	5.8	4.4	10.5	.1	.8	5.5
LOGAN . . . . .	24	9	1.6	8.1	1.5	2.9	6.4	19.2	12.1	30.6	1.0	.8	10.4
LONGKE . . . . .	25	6	2.0	13.2	1.7	3.6	9.9	30.7	28.0	54.0	1.8	1.0	9.1
MISSISSIPPI . . . . .	60	24	4.8	28.9	4.0	8.0	21.8	108.0	124.1	231.1	5.0	4.6	57.4
MONROE . . . . .	21	4	.8	4.0	.7	1.4	3.4	11.8	7.2	18.8	.3	.8	6.3
MONTGOMERY . . . . .	18	4	.6	2.3	.5	1.0	2.2	4.2	4.6	8.3	.3	.3	2.0
NEVADA . . . . .	17	5	.9	4.5	.8	1.7	3.9	9.7	6.2	15.9	.4	.7	5.0
OUACHITA . . . . .	79	31	3.9	28.9	3.3	6.7	22.9	63.0	67.5	128.1	4.0	3.2	38.5
PHILLIPS . . . . .	36	15	2.6	17.6	2.1	4.2	13.5	44.7	102.6	142.9	1.6	2.5	45.2
PIKE . . . . .	26	8	.8	3.9	.7	1.4	3.4	8.4	14.4	22.9	1.1	.5	3.4
POINSETT . . . . .	18	7	2.7	15.7	2.6	5.1	13.3	31.1	25.8	55.2	(D)	2.8	17.1
POLK . . . . .	34	14	1.9	10.1	1.6	3.5	8.3	27.7	48.1	74.5	1.4	1.5	10.0
POPE . . . . .	44	14	3.2	19.2	2.6	5.2	13.8	55.2	129.2	183.4	4.5	2.5	31.6
PRAIRIE . . . . .	15	4	.5	2.2	.5	1.0	1.9	7.9	6.7	14.4	.2	.4	3.7
PULASKI . . . . .	358	144	25.1	167.5	19.6	39.1	115.9	387.0	457.2	839.1	25.3	20.0	214.1
RANDOLPH . . . . .	31	5	1.2	6.7	1.2	2.1	6.1	24.8	11.5	36.2	.2	.9	9.4
ST FRANCIS . . . . .	25	12	3.7	23.7	3.1	6.0	17.0	44.5	94.2	136.9	1.5	3.0	23.2
SALINE . . . . .	32	12	3.2	30.4	2.6	4.9	22.0	47.6	67.6	116.2	5.7	4.2	52.8
SCOTT . . . . .	16	8	.8	4.3	.8	1.5	3.8	7.5	22.6	30.5	.3	(D)	(D)
SEARCY . . . . .	17	5	1.1	4.3	1.0	2.1	4.0	12.4	1.4	13.9	.1	.7	3.8
SEBASTIAN . . . . .	196	95	16.7	107.3	13.6	26.6	77.5	249.2	301.9	556.9	10.3	12.8	154.7
SEVIER . . . . .	20	5	1.3	6.7	1.3	2.7	6.0	12.5	26.9	39.8	2.0	1.0	5.9
UNION . . . . .	115	31	4.6	30.8	2.9	6.1	18.0	76.2	80.8	159.2	7.2	5.1	86.1
WASHINGTON . . . . .	96	39	8.9	50.7	7.7	15.4	40.2	119.6	239.3	354.3	6.9	6.9	68.5
WHITE . . . . .	46	17	2.7	14.7	2.4	4.6	12.1	57.2	32.1	88.4	1.8	1.9	24.3
WOODRUFF . . . . .	8	4	.8	3.7	.8	1.4	3.3	8.3	9.6	16.7	(D)	.7	6.4

(D) Withheld to avoid disclosing figures for individual companies. (Z) Less than half the unit of measurement shown.

<sup>1</sup>Some counties were withheld from publication in order to (a) avoid disclosing figures for individual companies or (b) permit further checking of the figures for smaller counties. Additional detail will appear in the final report for this State.<sup>2</sup>Includes employment and payroll at central administrative offices and auxiliary units. (For a definition of these units, see appendix.)<sup>3</sup>The total cost of materials and value of shipments may include extensive duplication arising from shipments between establishments in the same industry classification. (For a more complete explanation, see appendix.)<sup>4</sup>The standard metropolitan statistical areas in this State are defined as follows:

FAYETTEVILLE-SPRINGDALE SMSA: Consists of Benton and Washington Counties, AR.

FORT SMITH, AR-OK, SMSA: Consists of Crawford and Sebastian Counties, AR, and Le Flore and Sequoyah Counties, OK.

LITTLE ROCK-NORTH LITTLE ROCK SMSA: Consists of Pulaski and Saline Counties, AR.

MEMPHIS, TN-AR-MS, SMSA: Consists of Shelby and Tipton Counties, TN; Crittendon County, AR; and DeSoto County, MS.

PINE BLUFF SMSA: Coextensive with Jefferson County, AR.

TEXARKANA, TX-TEXARKANA, AR SMSA: Consists of Bowie County, TX, and Little River and Miller Counties, AR.



TABLE 3. General Statistics for the State, by Industry Groups and Industries: 1972 and 1967

(See appendix, Explanation of Terms)

Code	Industry	1972											1967	
		Establishments		All employees		Production workers			Value added by manufacture	Cost of materials <sup>1</sup>	Value of shipments <sup>1</sup>	Capital expenditures, new	All employees	Value added by manufacture
		Total	With 20 employees or more	Number	Payroll	Number	Man-hours	Wages						
		(number)	(number)	(1,000)	(million dollars)	(1,000)	(million)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(1,000)	(million dollars)
	ALL INDUSTRIES, TOTAL <sup>2</sup> . . . .	2 864	1 033	180.0	1 148.0	149.0	297.0	850.5	2 767.1	3 685.1	6 400.8	216.2	143.6	1 557.7
20	FOOD AND KINDRED PRODUCTS. . . .	338	174	24.8	139.9	19.6	40.6	97.0	353.7	1 221.2	1 564.7	28.5	21.5	262.8
201	MEAT PRODUCTS. . . . .	83	47	10.0	49.9	9.3	19.5	43.9	84.0	354.2	440.7	9.2	8.5	60.4
2011	MEATPACKING PLANTS . . . . .	41	13	1.1	7.0	.9	2.0	5.3	9.6	72.2	81.6	.9	CC	(D)
2016	POULTRY DRESSING PLANTS. . . . .	35	30	8.5	40.8	8.0	16.7	36.9	71.0	267.1	340.6	7.7	(NA)	(NA)
202	DAIRY PRODUCTS . . . . .	27	15	1.1	7.9	.5	1.0	3.1	18.9	55.3	75.2	1.6	1.4	16.8
2026	FLUID MILK . . . . .	15	9	.7	5.4	.3	.5	1.9	15.4	35.5	50.7	.9	.8	9.9
203	PRESERVED FRUITS AND VEGETABLES. .	25	21	5.6	28.5	4.9	9.2	22.1	100.3	160.6	260.3	5.5	(NA)	(NA)
2033	CANNED FRUITS AND VEGETABLES . . . .	12	10	1.7	7.5	1.5	2.6	5.6	21.9	36.8	58.7	2.5	1.2	7.6
2038	FROZEN SPECIALTIES . . . . .	6	5	2.7	14.4	2.4	4.7	11.9	44.4	79.2	123.0	1.5	(NA)	(NA)
204	GRAIN MILL PRODUCTS. . . . .	65	26	2.4	14.3	1.6	3.7	8.8	41.9	341.5	381.8	5.1	2.2	47.7
205	BAKERY PRODUCTS. . . . .	23	14	1.8	15.2	1.0	2.2	7.4	31.3	30.3	61.6	2.0	2.0	27.9
207	FATS AND OILS. . . . .	23	19	1.5	9.4	1.2	2.9	7.0	44.8	244.4	277.8	2.8	(NA)	(NA)
2074	COTTONSEED OIL MILLS . . . . .	9	8	.6	3.5	.5	1.2	2.5	11.3	46.6	55.4	.9	BB	(D)
208	BEVERAGES. . . . .	52	26	2.0	12.6	.7	1.5	3.5	27.5	28.5	55.6	1.7	EE	(D)
22	TEXTILE MILL PRODUCTS. . . . .	18	13	4.1	26.0	3.6	7.6	20.8	66.3	88.9	150.8	5.3	3.1	32.2
23	APPAREL & OTHER TEXTILE PRODUCTS	85	64	15.4	63.3	14.1	27.0	55.6	136.7	81.1	218.1	2.2	13.3	71.8
232	MEN'S AND BOYS' FURNISHINGS. . . .	37	37	10.2	40.8	9.4	17.7	36.7	106.2	54.3	160.6	1.4	7.3	40.9
2328	MEN'S AND BOYS' WORK CLOTHING. . . .	6	6	1.5	5.6	1.3	2.5	5.2	12.3	7.2	19.5	.2	EE	(D)
2329	MEN'S AND BOYS' CLOTHING, NEC. . . .	7	7	1.3	6.0	1.2	2.1	4.9	11.4	8.6	19.6	.1	CC	(D)
233	WOMEN'S, AND MISSES' OUTERWEAR . . .	17	14	3.5	15.6	3.1	6.3	12.7	18.7	18.7	37.2	.5	3.4	16.6
2335	WOMEN'S AND MISSES' DRESSES. . . . .	7	6	1.7	8.1	1.5	3.6	6.8	9.2	9.9	20.0	(D)	2.0	9.7
234	WOMEN'S & CHILDREN'S UNDERGARMENTS	5	4	.7	2.9	.7	1.3	2.8	5.9	3.6	9.9	.1	BB	(D)
238	MISC. APPAREL AND ACCESSORIES. . . .	4	4	.4	1.4	.4	.7	1.3	1.6	.8	2.5	.1	.9	4.7
24	LUMBER AND WOOD PRODUCTS . . . . .	915	207	20.9	123.1	18.5	39.4	103.6	263.3	315.4	581.0	27.7	(NA)	(NA)
2411	LOGGING CAMPS & LOGGING CONTRACTORS.	401	19	2.6	15.9	2.4	4.8	14.1	36.5	47.4	83.8	5.5	2.0	16.9
242	SAWMILLS AND PLANING MILLS . . . . .	357	104	10.3	59.9	9.2	20.0	51.1	126.0	141.4	270.3	12.5	11.9	78.0
2421	SAWMILLS AND PLANING MILLS, GENERAL.	284	67	7.4	44.9	6.6	14.5	38.4	102.9	109.8	214.7	11.4	8.2	55.2
243	MILLWORK, PLYWOOD & STRUC. MEMBERS	44	20	2.6	18.1	2.3	5.4	15.3	46.4	53.4	99.5	3.7	(NA)	(NA)
2436	SOFTWOOD VENEER AND PLYWOOD. . . . .	7	7	1.7	13.8	1.6	4.0	12.0	39.0	39.0	77.9	3.2	(NA)	(NA)
244	WOOD CONTAINERS. . . . .	32	19	1.7	8.5	1.6	3.2	7.1	13.4	17.4	30.5	.9	(NA)	(NA)
245	WOOD BUILDINGS AND MOBILE HOMES. . .	14	12	1.2	6.0	.9	1.7	4.5	12.3	22.2	34.6	1.0	(NA)	(NA)
2451	MOBILE HOMES . . . . .	14	12	1.2	6.0	.9	1.7	4.5	12.3	22.2	34.6	1.0	(NA)	(NA)
249	MISCELLANEOUS WOOD PRODUCTS. . . . .	67	33	2.5	14.7	2.2	4.3	11.6	28.7	33.5	62.2	4.0	(NA)	(NA)
25	FURNITURE AND FIXTURES . . . . .	114	56	11.7	66.5	10.1	19.5	49.6	133.3	127.2	257.0	7.7	9.7	70.6
251	HOUSEHOLD FURNITURE . . . . .	82	40	9.3	51.5	8.2	15.8	39.8	100.5	102.8	201.5	5.3	(NA)	(NA)
2512	UPHOLSTERED HOUSEHOLD FURNITURE. . .	22	16	2.3	12.5	2.0	3.7	9.4	23.3	24.5	47.5	.6	(NA)	(NA)
26	PAPER AND ALLIED PRODUCTS. . . . .	57	46	9.6	91.4	8.0	16.7	71.1	243.9	325.0	568.4	43.4	7.4	150.2
264	MISC. CONVERTED PAPER PRODUCTS . . .	26	19	2.9	25.0	2.5	5.3	20.0	84.3	130.8	213.7	32.9	1.9	34.4
265	PAPERBOARD CONTAINERS AND BOXES. . .	22	19	2.6	19.8	2.1	4.4	14.8	43.6	56.9	100.0	1.7	EE	(D)
2654	SANITARY FOOD CONTAINERS . . . . .	3	3	.9	7.2	.8	1.8	6.1	20.6	22.0	42.3	1.1	CC	(D)
27	PRINTING AND PUBLISHING. . . . .	270	57	6.1	43.9	4.3	8.4	28.0	117.7	44.7	163.4	10.4	5.9	69.7
2711	NEWSPAPERS . . . . .	112	26	2.4	16.7	1.4	2.6	8.4	35.5	10.3	45.9	6.4	2.2	21.1
275	COMMERCIAL PRINTING. . . . .	117	17	1.4	11.4	1.0	1.9	7.4	19.2	12.3	31.5	2.6	(NA)	(NA)
2751	COMMERCIAL PRINTING, LETTERPRESS . . .	71	6	.7	5.1	.5	.9	3.4	9.8	4.6	14.4	.5	(NA)	(NA)
28	CHEMICALS AND ALLIED PRODUCTS. . . .	64	19	4.2	40.3	3.1	5.9	27.4	131.1	133.7	266.1	10.1	4.1	96.9
281	INDUSTRIAL INORGANIC CHEMICALS . . . .	11	5	2.5	27.2	1.9	3.6	19.3	52.3	65.5	119.2	6.9	(NA)	(NA)
287	AGRICULTURAL CHEMICALS . . . . .	17	6	.9	7.0	.6	1.2	4.5	37.1	32.8	71.4	.3	(NA)	(NA)
289	MISCELLANEOUS CHEMICAL PRODUCTS. . .	10	2	.5	2.9	.4	.7	1.8	7.9	4.8	11.9	1.4	(NA)	(NA)
29	PETROLEUM AND COAL PRODUCTS. . . .	18	13	1.0	8.9	.6	1.8	5.7	18.3	36.5	56.0	1.7	1.5	39.6
295	PAVING AND ROOFING MATERIALS . . . .	12	8	.7	5.9	.6	1.4	4.2	11.3	17.6	28.5	1.7	BB	(D)
2952	ASPHALT FELTS AND COATINGS . . . . .	5	5	.5	4.3	.4	1.0	3.0	8.6	13.5	22.1	.7	BB	(D)
30	RUBBER AND MISC. PLASTICS PROD . . . .	56	32	7.4	52.1	5.9	11.5	39.2	138.1	106.1	243.9	12.4	(NA)	(NA)
31	LEATHER AND LEATHER PRODUCTS . . . .	31	28	8.9	42.2	8.3	15.4	36.4	83.7	60.2	141.8	1.3	FF	(D)
314	FOOTWEAR, EXCEPT RUBBER. . . . .	25	24	8.2	39.7	7.7	14.2	34.0	77.6	55.2	130.8	1.2	FF	(D)
3144	WOMEN'S FOOTWEAR, EXCEPT ATHLETIC. .	13	13	4.1	18.9	3.8	6.8	15.8	38.3	22.0	58.9	.4	(NA)	(NA)
32	STONE CLAY, AND GLASS PRODUCTS . . .	187	46	4.8	35.4	3.9	7.8	26.3	95.1	66.4	159.1	10.3	3.4	48.1
325	STRUCTURAL CLAY PRODUCTS . . . . .	11	10	1.1	7.2	.9	2.0	5.5	15.0	6.3	21.6	.6	.9	2.3
3251	BRICK AND STRUCTURAL CLAY TILE . . . .	8	8	.6	4.5	.5	1.3	3.5	11.4	3.3	14.9	.4	CC	(D)
327	CONCRETE, GYPSUM, PLASTER PRODUCTS	137	23	1.8	12.3	1.4	3.0	9.2	31.3	33.3	63.9	7.7	1.3	17.3
3272	CONCRETE PRODUCTS, NEC . . . . .	40	6	.4	2.8	.4	.7	2.0	7.1	4.3	10.9	.4	.3	2.4
3273	READY-MIXED CONCRETE . . . . .	81	9	.8	5.5	.6	1.2	4.0	13.2	18.8	32.0	2.6	.6	8.2
329	MISC. NONMETALLIC MINERAL PRODUCTS	15	4	.5	3.2	.4	.7	2.3	13.8	10.4	23.2	.2	(NA)	(NA)
33	PRIMARY METAL INDUSTRIES . . . . .	33	28	5.8	49.2	4.8	9.6	37.4	111.6	231.8	339.7	14.3	4.0	70.7
332	IRON AND STEEL FOUNDRIES . . . . .	8	6	.7	4.2	.6	1.2	3.2	8.0	3.9	11.7	1.7	.6	4.6

See footnotes at end of table.

TABLE 3. General Statistics for the State, by Industry Groups and Industries: 1972 and 1967—Continued

(See appendix, Explanation of Terms)

Code	Industry	1972										1967		
		Establishments		All employees		Production workers			Value added by manufacture	Cost of materials <sup>1</sup>	Value of shipments <sup>1</sup>	Capital expenditures, new	All employees	Value added by manufacture
		Total	With 20 employees or more	Number	Payroll	Number	Man-hours	Wages						
		(number)	(number)	(1,000)	(million dollars)	(1,000)	(million)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(1,000)	(million dollars)
336	NONFERROUS FOUNDRIES. . . . .	11	9	1.1	6.9	.9	1.8	5.3	16.4	14.9	30.8	2.7	.9	10.3
3361	ALUMINUM FOUNDRIES. . . . .	7	5	.3	1.6	.3	.5	1.2	3.2	4.7	7.7	.3	CC	(D)
34	FABRICATED METAL PRODUCTS . . .	155	69	12.1	81.8	10.0	20.2	58.7	189.2	195.2	373.8	13.7	(NA)	(NA)
344	FABRICATED STRUCTURAL METAL PROD. .	89	34	4.0	26.5	3.2	6.4	18.2	57.6	71.7	128.2	4.6	2.6	19.9
3441	FABRICATED STRUCTURAL METAL PROD. .	19	10	1.3	9.4	.9	1.8	5.3	28.0	33.9	62.0	.9	1.1	6.7
3444	SHEET METALWORK . . . . .	22	4	.4	2.3	.3	.7	2.0	4.7	2.8	7.5	.2	.4	3.3
349	MISC. FABRICATED METAL PRODUCTS . .	24	16	3.1	20.7	2.7	5.3	16.2	43.5	35.7	77.9	3.6	(NA)	(NA)
3494	VALVES AND PIPE FITTINGS. . . . .	7	6	1.8	11.2	1.6	3.0	8.8	25.2	22.3	46.6	3.0	CC	(D)
3496	MISC. FABRICATED WIRE PRODUCTS. . .	5	4	.5	3.0	.4	.7	1.9	6.0	3.9	9.8	.3	(NA)	(NA)
35	MACHINERY, EXCEPT ELECTRICAL. . .	215	50	7.5	53.6	5.6	11.2	34.6	131.7	112.3	237.6	5.4	5.2	60.0
352	FARM AND GARDEN MACHINERY . . . .	28	8	.7	4.2	.5	.9	2.7	7.5	9.4	16.8	.2	(NA)	(NA)
353	CONSTRUCTION AND RELATED MACHINERY	13	4	1.2	10.5	.7	1.5	5.6	27.6	17.0	38.5	.7	CC	(D)
355	SPECIAL INDUSTRY MACHINERY. . . . .	17	8	.4	3.4	.3	.7	2.2	7.2	4.7	11.1	.7	AA	(D)
356	GENERAL INDUSTRIAL MACHINERY. . . .	12	6	1.2	7.9	.8	1.7	4.8	20.4	23.0	47.7	1.2	.7	4.6
359	MISC. MACHINERY, EXCEPT ELECTRICAL.	94	4	.5	3.4	.4	.7	2.5	6.7	3.0	9.7	.6	(NA)	(NA)
36	ELECTRIC & ELECTRONIC EQUIPMENT	64	45	17.9	117.0	15.4	29.5	90.8	321.8	300.2	621.1	11.2	(NA)	(NA)
361	ELECTRIC DISTRIBUTING EQUIPMENT . .	6	5	1.2	8.7	.8	1.5	5.9	17.5	22.4	40.2	(D)	(NA)	(NA)
362	ELECTRICAL INDUSTRIAL APPARATUS . .	12	11	7.3	45.6	6.6	13.0	38.6	128.3	83.0	206.2	5.1	3.8	44.2
3621	MOTORS AND GENERATORS . . . . .	12	11	7.3	45.6	6.6	13.0	38.6	128.3	83.0	206.2	5.1	FF	(D)
37	TRANSPORTATION EQUIPMENT. . . . .	93	35	6.2	40.6	5.2	9.9	30.6	96.1	122.7	213.3	8.7	(NA)	(NA)
371	MOTOR VEHICLES AND EQUIPMENT. . . .	42	13	2.9	18.8	2.4	4.8	14.2	52.4	48.1	99.2	6.7	CC	(D)
3714	MOTOR VEHICLE PARTS AND ACCESSORIES	25	8	2.1	13.7	1.7	3.4	10.3	41.1	34.1	75.2	6.3	.3	2.4
373	SHIP & BOAT BUILDING & REPAIRING. .	22	10	1.2	7.7	.9	1.5	5.0	14.2	16.4	29.5	.8	.5	3.3
3732	BOAT BUILDING AND REPAIRING . . . . .	22	10	1.2	7.7	.9	1.5	5.0	14.2	16.4	29.5	.8	BB	(D)
399	MISCELLANEOUS MANUFACTURES. . . . .	47	10	.7	3.6	.6	1.1	2.5	7.1	6.0	13.0	.2	.6	4.7
--	ADMINISTRATIVE AND AUXILIARY. . . .	59	21	2.5	25.7	-	-	-	-	-	-	-	1.4	-

Note: The following symbols indicate employment size range for 1967:

AA less than 250 employees      EE 1,000 to 2,499 employees  
BB 250 to 499 employees      FF 2,500 employees and over  
CC 500 to 999 employees

- Represents zero. (NA) Not available. Because of a revision to this industry or industry group in the 1972 edition of the SIC manual, 1967 census data are not available on a comparable basis. (D) Withheld to avoid disclosing figures for individual companies.

<sup>1</sup>The total cost of materials and value of shipments for industry groups shown may include extensive duplication arising from shipments between establishments in the same industry classification. (For a more complete explanation, see appendix.)

<sup>2</sup>Includes figures for industry groups which have been withheld from publication in order to (a) avoid disclosing figures for individual companies or (b) permit further checking of figures for smaller industry groups. Additional detail will appear in the final report for this State.



## Appendix A. SCOPE AND COVERAGE

This report is one of a series presenting preliminary information, by State, from the 1972 Census of Manufactures. The data will be superseded in a final report which, in turn, will be included in *Volume III, Area Statistics, 1972 Census of Manufactures*. The final report will include a comprehensive discussion of the concepts and definitions used in the census.

The census of manufactures covers each manufacturing establishment in the United States with one paid employee or more; manufacturing establishments with no employees are excluded. Firms which operated more than one establishment were required to file a separate report for each location. Companies which engaged in distinctly different lines of activity at one location were asked to submit separate reports if the company records permitted such a separation and the activities were of significant size.

This report includes figures for administrative offices, warehouses, garages, or other auxiliary units which service manufacturing establishments.

In the 1972 census, the approximately 120,000 manufacturing establishments with fewer than 10 employees were excused from filing reports. Under special arrangements which safeguarded the confidentiality of both tax and census records, data on payrolls, sales, and industry classification from the administrative records of the Social Security Administration and the Internal Revenue Service were made available to the Census Bureau for use in the 1972 Economic Censuses (retail and wholesale trade, service industries, construction industries, manufactures, and mineral industries). Estimates for data other than payrolls and sales for these small establishments were constructed from industry averages. The effect on industry aggregates is slight in most industries. For manufacturing as a whole, these small establishments account for less than 3 percent of the payrolls and value added.

Establishments are classified by industry in accordance with industry definitions described in the 1972 edition of the Standard Industrial Classification (SIC) Manual. For 1972, the SIC was significantly revised and the comparability with prior year's data for some industries was significantly affected. The comparability at the 2- and 3-digit SIC levels was less affected. The final volumes of the 1972 Census of Manufactures will contain a table relating aggregates based on the 1972 SIC with aggregates derived from classifying establishments according to the 1967 SIC definitions.

As in earlier censuses, a number of small establishments may have been misclassified as to industry. However, such possible misclassifications have significant effect on *none* of the statistics except the number of establishments. As indicated above, report forms were not mailed to very small establishments (fewer than 10 employees). The industry classifications for these establishments were assigned on the basis of brief descriptions of the general activity of the establishment. Where the description is incomplete or there are relatively fine lines of demarcation among industries or between manufacturing and nonmanufacturing activity, the code assigned to an establishment could differ from that which would have been assigned on the basis of more complete product information. Therefore, the total establishment count for individual industries should be viewed as an approximation rather than a precise measurement. The counts for establishments with 20 employees or more are more reliable than the total number of establishments.

More detailed figures for this State will appear in the final census reports. Final reports will also include a comprehensive discussion of such concepts as "industry" and "establishment," as well as the various statistical items such as "employment," "value of shipments," and "value added." Similar preliminary and final reports will be issued for other States during the coming months. A series of preliminary summary reports showing U.S. totals for each manufacturing industry and for each State are being issued. Final industry reports and final area reports will be published during 1974.

Order forms describing the individual reports and listing their prices may be obtained from any U.S. Department of Commerce district office or from the Publications Distribution Section, Social and Economic Statistics Administration, Washington, D.C. 20233.

The 1972 Census of Manufactures is the 29th census of manufacturing establishments in the United States. For 1972, it was conducted jointly with the censuses of mineral industries, construction industries, retail trade, wholesale trade, and selected services under authority of Title 13 of the United States Code. Title 13 specifies that a census of manufactures be conducted every 5 years and, as amended, to cover years ending in "2" and "7". Title 13 also authorizes an annual sample survey of manufacturing establishments in interim years.



## Appendix B. EXPLANATION OF TERMS

*(For a more complete discussion of these terms and the method of compiling the Census of Manufactures, see the "Introduction" to the 1967 Census of Manufactures, Volume III).*

**All Employees**—All full-time and part-time employees on the payrolls of operating manufacturing establishments for any part of the pay period ending nearest the 12th of the months specified on the report form. Included are all persons on paid sick leave, paid holidays, and paid vacations during these pay periods. Officers of corporations are included as employees; proprietors and partners of unincorporated firms are excluded. The "all employee" number is the average number of production workers for the midmonth payroll period of March, May, August, and November plus the number of nonproduction employees in mid-March.

**Number of Production Workers**—Workers (up through the working foreman level) engaged in fabricating, processing, assembling, inspecting, receiving, packing, warehousing, shipping (but not delivering), and maintenance, repair, janitorial, and watchman services, product development, auxiliary production for plant's own use (e.g., powerplant), recordkeeping, and other closely associated services. Proprietors and partners are excluded.

**Payroll**—This item includes all forms of compensation such as salaries, wages, commissions, dismissal pay, bonuses, vacation and sick leave pay, and compensation in kind, prior to such deductions as employees' Social Security contributions, withholding taxes, group insurance, union dues, and savings bonds. The total includes salaries of officers of these establishments, if a corporation; it excludes payments to the proprietor or partners, if an unincorporated concern. Respondents were told that in reporting they could follow the definition of payrolls used for calculating the Federal withholding tax.

**Man-Hours of Production Workers**—This total relates to production-worker man-hours worked or paid for at the plant including actual overtime hours (not straight-time equivalent hours). It excludes hours paid for vacation, holidays, or sick leave when the employee was not at the plant.

**Cost of Materials**—The term "Cost of Materials" refers to charges actually paid or payable for items consumed or put into production during the year, including freight and other direct charges incurred by the establishment in acquiring these materials. It includes the cost of materials or fuel consumed regardless of

whether these items were purchased by the establishment from other companies, transferred to it from other establishments of the same company, or withdrawn from inventory during the year. The establishment was requested to value materials transferred from other parts of the company at its approximate market value, not at cost of production. The important components of this cost item are (a) all raw materials, semifinished goods, parts, components, containers, scrap, and supplies put into production or used as operating supplies and for repair and maintenance during the year; (b) electric energy purchased; (c) fuels consumed for heat, power, or the generation of electricity; (d) work done by others on materials or parts furnished by manufacturing establishments (contract work); and (e) products bought and resold in the same condition.

**Value of Shipments**—The value of shipments is the received or receivable net selling value, f.o.b. plant (exclusive of freight and taxes), of all products shipped, both primary and secondary, as well as all miscellaneous receipts such as receipts for contract work performed for others, installation and repair, sales of scrap, and sale of products bought and resold without further processing. Included are all items made by the establishment or for it under contract from materials owned by it whether sold, transferred to other plants of the same company, or shipped on consignment. The net selling value of products made in one plant on a contract basis from materials owned by another was reported by the plant providing the materials.

In the case of multiunit companies, the manufacturer was requested to report the value of products transferred to other establishments of the same company at full economic value; i.e., to include not only the direct costs of production but also a reasonable proportion of "all other costs" (including company overhead) and profit.

**Duplication in Cost of Materials and Value of Products**—The aggregate cost of materials and value-of-shipments figures for industry groups and for all manufacturing industries may include large amounts of duplication since the products of some industries are used as materials by others. With some important exceptions, such as motor vehicles and parts, this duplication is not significant within individual industries but arises from the addition of the totals of related industries in successive stages of the production of a finished manufactured product. Examples are the addition of flour mills to bakeries in the food group and the addition of pulp mills to paper mills in the paper and allied products group of industries. Esti-



mates of this duplication indicate that the value of manufactured products exclusive of such duplication—the value of finished manufactures—approximates two-thirds of the total value of products.

Prior to 1962, the Bureau of the Census did not publish figures for cost of materials or value of shipments if they contained significant duplication. Effective with the 1962 annual survey these figures were shown at all industry levels for the United States to meet the requests for their use in studies in which the presence of an indeterminate amount of duplication is not a limiting factor. However, they are appropriately footnoted. Effective with the 1964 annual survey, these industry group totals are also shown at the State, standard metropolitan statistical area, and large-county level.

Even where there is no significant amount of duplication, value-of-shipments figures are deficient as measures of the relative economic importance of individual manufacturing industries or geographic areas because of the wide variation in ratio of materials, labor, and other processing costs to value of shipments among industries.

**Value Added by Manufacture**—This measure of manufacturing activity is derived by subtracting the cost of materials, supplies, containers, fuel, purchased electricity, and cost of resales contract work from the value of shipments for products manufactured plus resales and receipts for services rendered. The result of this calculation is adjusted by the net change in finished goods and work-in-process inventories between the beginning and end of the year. (In the few industries that report value of production rather than value of shipments, only changes in work-in-process inventories are used to adjust value added. In the shipbuilding and repairing industry, no inventory adjustment is made.)

“Value added” avoids the duplication in the value of shipments figure which results from the use of products of some establishments as materials by others. Value added is considered to be the best value measure available for comparing the relative economic importance of manufacturing among industries and geographic areas.

**Expenditures for Plant and Equipment**—Manufacturing establishments in operation and establishments under construction but not yet in operation, were asked to report their expenditures for (a) permanent additions and major alterations to the manufacturing establishment, and (b) new machinery and equipment used for replacement purposes and additions to plant capacity if they are of the type for which depreciation accounts are ordinarily maintained.

These totals exclude expenditures for new facilities and equipment leased from nonmanufacturing concerns; new facilities owned by the Federal Government but operated under contract by private companies; and plant and equipment furnished to the manufacturer by communities and nonprofit organizations. Expenditures for used plant and equipment (although reported in the census), expenditures for land, and cost of maintenance and repairs charged as current operating expense are also omitted from the figures for new capital expenditures.

**Central Administrative Offices and Auxiliary Units**—In the 1972 census as in previous years, respondents were asked to file separate reports for central administrative offices or auxiliary units which were (1) at different locations from the establishments served or, (2) at the same location as one of these establishments but were not operated as an integral part thereof and served two or more establishments. The functions of employees in central administrative offices include general company policy determination, planning and management (that is, company purchasing, accounting, general engineering, direction of company personnel matters, and legal and patent matters). Auxiliaries are storage facilities, garages, repair shops, purchasing offices, sales promotion offices, and research laboratories serving the plants or central management of the company.

**Standard Metropolitan Statistical Areas**—Standard metropolitan statistical areas (SMSA) are integrated economic and social units with a large volume of daily travel and communication between the central city and outlying parts of the area.<sup>1</sup> Each area (except in New England) consists of one whole county or more. An area may contain not only highly industrialized counties but also adjoining counties which, though primarily residential in character, contribute significantly to the industrial counties' labor force and are socially and economically integrated with the central city. These areas are defined by the Federal Committee on Standard Metropolitan Statistical Areas of the Office of Management and Budget for general-purpose use throughout the Federal Government in presenting economic and social data. In the New England States, similar intergration criteria are applied in defining

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<sup>1</sup> Each standard metropolitan statistical area must include either (1) a city with 50,000 or more inhabitants, or (2) a city having a population of at least 25,000 which (a) with the addition of the population of contiguous places has a population density of at least 1,000 persons per square mile; (b) constitutes, for general economic and social purposes, a single community with a combined population of at least 50,000; and (c) includes a total population of at least 75,000 in the county or counties in which the city and contiguous places are located.

SMSA's on a city and town basis because towns rather than counties are regarded as the significant unit in this region of the country.

The requirement that each SMSA consist of county units (except in New England) sometimes results in the inclusion in an area of considerable amount of territory which would not ordinarily be considered "metropolitan," much less "industrial." It is recognized that metropolitan areas could be more accurately defined in terms of smaller area segments such as minor civil

divisions, but the usefulness of areas so defined would be limited by the fact that many types of economic and social data are available only on a county basis.

Each SMSA is designated by the name of the principal city of the area. In addition to the name of the principal city, the area title may include one or two additional city names.

The data for SMSA's which changed definition since the 1967 census have not been retabulated on the new basis for years prior to 1972.







## PRELIMINARY REPORT

**1972 CENSUS OF  
MANUFACTURES**

## AREA SERIES

C72(P)-S5

ued March 1974

U. S. DEPARTMENT OF COMMERCE • Social and Economic Statistics Administration • BUREAU OF THE CENSUS

**California**

Value added by manufacturing in 1972 in the State of California amounted to \$31,383 million, a 14-percent increase from 1971 and a 34-percent increase from 1967.

This report presents preliminary results from the 1972 Census of Manufactures for the State, its Standard Metropolitan Statistical Areas, and its counties.

Data are provided for industry groups within the State. Historical data, back to 1958, are included for the State as a whole,

and 1967 figures on employment and value added are provided for the smaller areas.

The figures in this report have been subjected to only preliminary review and must be regarded as approximations of the final census figures. No adjustments have been made in the value figures for changes in price level.

For an explanation of the terms used in the tables, see the appendix at the end of this report.

**TABLE 1. General Statistics for the State: 1972 and Earlier Years**

(See appendix, Explanation of Terms)

Year	Establishments		All employees <sup>1</sup>		Production workers			Value added by manufactures <sup>2</sup>	Cost of materials <sup>2</sup>	Value of shipments	Capital expenditures, new
	Total	With 20 employees or more	Number	Payroll	Number	Man-hours	Wages				
	(number)	(number)	(1,000)	(million dollars)	(1,000)	(millions)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(million dollars)
CALIFORNIA											
1972 Census .....	34,475	11,060	1,540.3	15,474.4	1,014.1	1,969.9	8,422.3	31,382.7	32,323.4	62,707.7	1,697.2
1971 ASM .....	(NA)	(NA)	1,447.3	13,799.1	937.2	1,843.5	7,382.3	27,568.2	27,541.7	54,440.3	1,416.9
1970 ASM .....	(NA)	(NA)	1,553.1	14,056.8	1,003.9	1,981.3	7,556.3	26,358.3	26,435.4	52,357.2	1,567.4
1969 ASM .....	(NA)	(NA)	1,631.8	14,151.1	1,075.2	2,119.6	7,701.1	27,016.9	27,242.9	53,937.0	1,720.9
1968 ASM .....	(NA)	(NA)	1,610.3	13,378.9	1,061.6	2,112.9	7,377.8	25,348.3	26,162.1	51,134.6	1,536.3
1967 Census .....	31,962	10,012	1,583.5	12,514.5	1,044.9	2,089.7	6,877.8	23,393.6	24,156.7	47,106.1	1,529.2
1966 ASM .....	(NA)	(NA)	1,501.8	11,381.4	984.0	1,981.9	6,266.6	21,331.1	23,030.7	43,705.5	1,471.2
1965 ASM .....	(NA)	(NA)	1,400.6	10,301.3	911.8	1,838.2	5,582.6	18,950.3	20,949.6	39,495.4	1,181.5
1964 ASM .....	(NA)	(NA)	1,383.7	9,904.7	879.7	1,770.2	5,234.5	18,016.9	19,667.8	37,514.0	1,032.4
1963 Census .....	32,201	9,079	1,397.6	9,612.2	897.5	1,791.4	5,195.2	17,185.0	(NA)	(NA)	985.1
1962 ASM .....	(NA)	(NA)	1,359.1	8,976.0	886.8	1,791.1	5,010.9	15,868.4	(NA)	(NA)	912.2
1961 ASM .....	(NA)	(NA)	1,304.6	8,203.9	859.7	1,713.4	4,640.0	14,305.0	(NA)	(NA)	696.7
1960 ASM .....	(NA)	(NA)	1,306.4	7,974.5	869.4	1,734.3	4,564.2	14,174.4	(NA)	(NA)	774.8
1959 ASM .....	(NA)	(NA)	1,295.2	7,668.3	884.4	1,757.4	4,494.8	13,501.4	(NA)	(NA)	725.1
1958 Census .....	28,735	7,858	1,217.3	6,876.3	838.7	1,656.7	4,107.2	12,048.0	(NA)	(NA)	753.2

Note: "ASM" data are based on a representative sample of manufacturing establishments canvassed in the Annual Survey of Manufactures. These estimates may differ from the results of a complete canvass of all manufacturing establishments. The standard errors associated with these estimates are published in the annual survey of manufactures volumes for this period. For comparative purposes, the 1972 ASM estimate for the State of California was 1,501 thousand employees, and \$30,864 million in value added with corresponding standard error of estimate of 1 and 1.

(NA) Not available.

<sup>1</sup>Includes employment and payroll at central administrative offices and auxiliary units. (For a definition of these units, see appendix.)

<sup>2</sup>The total cost of materials and value of shipments may include extensive duplication arising from shipments between establishments in the same industry classification. (For a more complete explanation, see appendix.)

TABLE 2. General Statistics for the State, Standard Metropolitan Statistical Areas, and Counties: 1972 and 1967

(See appendix, Explanation of Terms)

State, standard metropolitan statistical areas, and counties <sup>1</sup>	1972											1967	
	Establishments		All employees <sup>2</sup>		Production workers			Value added by manufac- ture	Cost of materials <sup>3</sup>	Value of shipments <sup>3</sup>	Capital expendi- tures, new	All employees	Value added by manufac- ture
	Total	With 20 employees or more	Number	Payroll	Number	Man-hours	Wages						
	(number)	(number)	(1,000)	(million dollars)	(1,000)	(million)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(1,000)	(million dollars)
CALIFORNIA, TOTAL, . . . . .	34 475	11 060	1 540.3	15 474.4	1 014.1	1 969.9	8 422.3	31 382.7	32 323.4	62 707.7	1 697.2	1 583.5	23 393.6
STANDARD METROPOLITAN STATISTICAL AREAS <sup>4</sup>													
ANAHEIM-SANTA ANA-GARDEN GROVE . . . . .	2 765	811	128.7	1 343.5	80.7	159.8	671.8	2 685.8	1 936.9	4 589.2	136.0	125.8	1 963.8
BAKERSFIELD, . . . . .	276	72	6.4	56.6	4.5	8.9	36.1	144.8	249.7	384.2	14.1	6.0	96.0
FRESNO . . . . .	539	167	19.0	152.5	14.1	26.8	99.1	408.9	606.7	1 004.7	19.7	15.5	227.0
LOS ANGELES-LONG BEACH . . . . .	17 797	5 746	772.3	7 646.2	517.4	1 013.4	4 175.1	15 153.4	14 863.6	29 307.6	683.0	843.6	12 088.2
MODESTO . . . . .	244	89	15.4	127.4	12.4	23.1	94.7	311.5	535.6	846.0	34.5	13.9	230.1
OXNARD-SIMI VALLEY-VENTURA . . . . .	301	101	15.1	147.4	10.2	20.2	80.4	351.8	276.3	624.8	21.7	10.8	160.5
RIVERSIDE-SAN BERNARDINO-ONTARIO . . . . .	1 283	394	57.0	521.7	41.6	81.8	346.7	1 027.0	1 133.3	2 157.3	66.1	46.4	678.7
SACRAMENTO . . . . .	637	175	22.0	215.1	14.6	28.3	124.1	557.1	662.3	1 217.2	29.7	26.6	571.3
SALINAS-SEASIDE-MONTEREY . . . . .	190	46	7.6	68.1	5.7	10.9	44.0	220.4	209.0	428.3	13.2	7.0	130.5
SAN DIEGO, . . . . .	1 382	355	64.3	657.8	41.9	82.8	369.5	1 193.3	909.9	2 119.9	52.0	63.5	803.8
SAN FRANCISCO-OAKLAND, . . . . .	4 893	1 471	185.2	1 955.7	117.2	207.0	1 083.0	3 960.6	5 199.5	9 129.1	274.9	196.0	3 160.0
SAN JOSE . . . . .	1 704	537	133.2	1 571.5	64.6	128.5	585.2	2 917.7	2 276.0	5 084.8	156.6	120.3	1 907.5
SANTA BARBARA-SANTA MARIA-LOMPOC . . . . .	283	72	9.7	93.2	5.8	11.3	41.8	159.0	141.6	290.7	14.4	8.5	108.6
SANTA CRUZ . . . . .	201	58	8.1	62.3	6.6	12.0	43.0	135.7	161.6	296.3	11.8	6.3	76.8
SANTA ROSA . . . . .	337	86	7.8	63.2	5.9	11.0	40.7	133.3	175.8	302.3	8.8	6.2	79.7
STOCKTON . . . . .	339	135	18.3	169.4	14.4	27.7	126.1	502.2	630.4	1 129.8	25.4	16.5	323.4
VALLEJO-FAIRFIELD-NAPA . . . . .	170	61	6.1	56.2	4.4	8.5	36.3	155.8	324.2	460.4	16.9	6.1	101.7
COUNTIES													
ALAMEDA, . . . . .	1 791	617	79.7	843.5	53.4	86.1	508.9	1 828.8	2 295.1	4 093.9	95.5	78.9	1 291.3
AMADOR . . . . .	24	4	.7	6.3	.6	1.3	6.0	15.6	17.9	32.5	(0)	.7	8.3
BUTTE . . . . .	142	36	3.7	28.5	3.0	5.8	20.8	66.3	110.2	174.8	3.2	2.9	40.3
CALAVERAS, . . . . .	22	4	.6	5.9	.4	.8	4.4	9.8	7.6	16.9	1.0	.6	10.6
CONTRA COSTA . . . . .	479	156	25.5	290.2	17.0	32.3	170.1	639.3	1 504.8	2 147.6	53.8	29.7	602.1
DEL NORTE, . . . . .	38	12	1.6	14.8	1.5	2.9	12.6	30.2	44.3	68.4	2.9	1.8	22.2
EL DORADO, . . . . .	59	10	1.1	8.8	.9	1.9	7.4	15.4	23.5	40.1	4.6	1.0	10.4
FRESNO . . . . .	539	167	19.0	152.5	14.1	26.8	99.1	408.9	606.7	1 004.7	19.7	15.5	227.0
GLENN, . . . . .	29	8	.6	5.0	.6	1.0	4.2	11.6	23.4	34.6	1.1	.6	5.2
HUMBOLDT . . . . .	288	68	9.6	87.6	8.2	16.7	71.8	208.7	247.0	466.6	12.9	8.9	117.0
IMPERIAL . . . . .	61	15	1.5	12.8	1.1	2.4	9.4	40.3	52.8	91.7	1.5	1.3	22.0
KERN . . . . .	276	72	6.4	56.6	4.5	8.9	36.1	144.8	249.7	384.2	14.1	6.0	96.0
KINGS, . . . . .	43	19	2.4	21.3	1.6	3.2	14.2	52.2	161.0	215.2	3.7	1.5	29.6
LASSEN . . . . .	24	8	.7	6.6	.6	1.3	5.5	14.7	22.5	36.4	1.4	.5	4.4
LOS ANGELES, . . . . .	17 797	574.6	772.3	7 646.2	517.4	1 013.4	4 175.1	15 153.4	14 863.6	29 307.6	683.0	843.6	12 088.2
MADERA . . . . .	56	18	2.2	18.6	1.7	3.5	14.1	50.5	123.8	168.3	8.2	1.2	29.5
MARIN, . . . . .	195	35	3.3	29.9	2.0	3.7	14.8	64.6	36.6	100.6	3.1	3.6	57.1
MENDOCINO, . . . . .	128	35	4.4	40.4	3.8	7.0	33.0	96.7	85.6	181.7	7.6	4.0	52.1
MERCED . . . . .	92	31	5.8	49.9	4.1	7.9	31.8	151.2	262.9	402.9	12.6	2.2	27.6
MONTEREY . . . . .	190	46	7.6	68.1	5.7	10.9	44.0	220.4	209.0	428.3	13.2	7.0	130.5
NAPA . . . . .	83	31	2.7	23.9	2.0	3.8	16.0	70.6	63.9	115.8	7.2	2.9	55.4
NEVADA . . . . .	50	10	.8	6.6	.6	1.2	5.3	18.0	11.9	29.6	1.8	.6	6.5
ORANGE . . . . .	2 765	811	128.7	1 343.5	80.7	159.8	671.8	2 685.8	1 936.9	4 589.2	136.0	125.8	1 963.8
PLACER . . . . .	54	13	1.9	16.6	1.5	3.1	13.3	49.5	59.3	107.1	2.3	1.7	24.2
PLUMAS . . . . .	35	9	1.1	9.8	1.0	1.9	8.4	23.4	28.3	51.8	1.3	1.0	12.0
RIVERSIDE . . . . .	509	156	21.3	184.4	15.6	30.7	120.1	344.7	398.9	744.3	22.3	16.7	197.9
SACRAMENTO . . . . .	470	123	15.9	165.4	9.8	19.2	86.8	402.2	415.8	813.7	21.4	21.9	487.1
SAN BENITO . . . . .	22	11	1.6	14.7	1.2	2.3	9.6	34.2	26.0	59.5	3.1	1.1	19.0
SAN BERNARDINO . . . . .	774	238	35.7	337.3	26.0	51.1	226.6	682.3	734.4	1 413.0	43.8	29.7	480.8
SAN DIEGO, . . . . .	1 382	355	64.3	657.8	41.9	82.8	369.5	1 193.3	909.9	2 119.9	52.0	63.5	803.8
SAN FRANCISCO, . . . . .	1 559	419	45.6	468.3	25.9	48.0	219.5	798.3	856.7	1 635.7	70.0	52.1	732.3
SAN JOAQUIN, . . . . .	339	135	18.3	169.4	14.4	27.7	126.1	502.2	630.4	1 129.8	25.4	16.5	323.4
SAN LUIS OBISPO, . . . . .	84	12	1.2	8.7	.9	1.7	5.9	26.2	53.0	79.8	.8	1.2	10.5
SAN MATEO, . . . . .	869	244	31.1	323.8	18.9	36.9	169.7	629.6	506.3	1 151.3	52.5	31.7	477.2
SANTA BARBARA, . . . . .	283	72	9.7	93.2	5.8	11.3	41.8	159.0	141.6	290.7	14.4	8.5	108.6
SANTA CLARA, . . . . .	1 704	537	133.2	1 571.5	64.6	128.5	585.2	2 917.7	2 276.0	5 084.8	156.6	120.3	1 907.5
SANTA CRUZ . . . . .	201	58	8.1	62.3	6.6	12.0	43.0	135.7	161.6	296.3	11.8	6.3	76.8
SHASTA . . . . .	158	41	4.6	45.0	3.8	7.2	36.0	86.2	128.1	211.9	10.1	4.4	49.9
SIERRA . . . . .	8	3	.3	2.8	.3	.6	2.4	6.7	7.4	14.1	.9	.1	.6
SISKIYOU . . . . .	80	25	2.6	25.2	2.2	4.5	20.5	58.8	70.9	127.3	1.8	2.9	36.1
SOLANO . . . . .	87	30	3.4	32.3	2.4	4.7	20.3	85.2	260.3	344.6	9.7	3.2	46.3
SONOMA . . . . .	337	86	7.8	63.2	5.9	11.0	40.7	133.3	175.8	302.3	8.8	6.2	79.7
STANISLAUS . . . . .	244	89	15.4	127.4	12.4	23.1	94.7	311.5	535.6	846.6	34.5	13.9	230.1
SUTTER . . . . .	45	13	1.5	10.2	1.3	2.1	8.2	26.2	41.1	66.7	1.5	1.4	21.1
TEHAMA . . . . .	45	20	2.3	23.3	2.0	4.6	18.8	48.0	72.7	121.2	2.3	2.2	37.6
TRINITY . . . . .	19	7	.7	5.7	.6	1.2	4.6	14.3	14.7	29.2	1.4	.6	7.4
TULARE . . . . .	202	71	7.7	57.4	6.1	12.2	41.9	166.1	202.7	359.9	14.5	5.4	76.2
TUOLUMNE . . . . .	34	9	1.0	9.4	.8	1.8	7.6	19.8	27.7	44.5	2.0	1.0	12.4
VENTURA . . . . .	301	101	15.1	147.4	10.2	20.2	80.4	351.8	276.3	624.8	21.7	10.8	160.5
YOLO . . . . .	113	39	4.2	33.1	3.3	6.0	24.0	105.4	187.2	296.4	6.0	3.0	60.0
YUBA . . . . .	39	15	1.2	9.3	1.0	2.2	7.3	19.9	34.1	53.6	1.9	.9	9.8

(D) Withheld to avoid disclosing figures for individual companies.

<sup>1</sup>Some counties were withheld from publication in order to (a) avoid disclosing figures for individual companies or (b) permit further checking of the figures for smaller counties. Additional detail will appear in the final report for this State.<sup>2</sup>Includes employment and payroll at central administrative offices and auxiliary units. (For a definition of these units, see appendix.)<sup>3</sup>The total cost of materials and value of shipments may include extensive duplication arising from shipments between establishments in the same industry classification. (For a more complete explanation, see appendix.)<sup>4</sup>The standard metropolitan statistical areas in this State are defined as follows:

ANAHEIM-SANTA ANA-GARDEN GROVE SMSA: Coextensive with Orange County, CA.

BAKERSFIELD SMSA: Coextensive with Kern County, CA.

FRESNO SMSA: Coextensive with Fresno County, CA.

LOS ANGELES-LONG BEACH SMSA: Coextensive with Los Angeles County, CA.

MODESTO SMSA: Coextensive with Stanislaus County, CA.

OXNARD-SIMI VALLEY-VENTURA SMSA: Coextensive with Ventura County, CA.

RIVERSIDE-SAN BERNARDINO-ONTARIO SMSA: Consists of Riverside and San Bernardino Counties, CA.

SACRAMENTO SMSA: Consists of Placer, Sacramento, and Yolo Counties, CA.

SALINAS-SEASIDE-MONTEREY SMSA: Coextensive with Monterey County, CA.

SAN DIEGO SMSA: Coextensive with San Diego County, CA.

SAN FRANCISCO-OAKLAND SMSA: Consists of Alameda, Contra Costa, Marin,

San Francisco, and San Mateo Counties, CA.

SAN JOSE SMSA: Coextensive with Santa Clara County, CA.

SANTA BARBARA-SANTA MARIA-LOMPOC SMSA: Coextensive with Santa Barbara County, CA.

SANTA CRUZ SMSA: Coextensive with Santa Cruz County, CA.

SANTA ROSA SMSA: Coextensive with Sonoma County, CA.

STOCKTON SMSA: Coextensive with San Joaquin County, CA.

VALLEJO-FAIRFIELD-NAPA SMSA: Consists of Napa and Solano Counties, CA.



TABLE 3. General Statistics for the State, by Industry Groups and Industries: 1972 and 1967

(See appendix, Explanation of Terms)

Code	Industry	1972										1967		
		Establishments		All employees		Production workers			Value added by manufacture	Cost of materials <sup>1</sup>	Value of shipments <sup>1</sup>	Capital expenditures, new	All employees	Value added by manufacture
		Total	With 20 employees or more	Number	Payroll	Number	Man-hours	Wages						
		(number)	(number)	(1,000)	(million dollars)	(1,000)	(million)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(1,000)	(million dollars)
	ALL INDUSTRIES, TOTAL <sup>2</sup> . . . . .	34 475	11 060	1 540.3	15 474.4	1 014.1	1 969.9	8 422.3	31 382.7	32 323.4	62 707.7	1 697.2	1 583.5	23 393.6
20	FOOD AND KINDRED PRODUCTS. . . . .	2 885	1 185	157.1	1 372.2	113.1	214.8	895.1	4 020.4	7 773.9	11 731.1	244.8	159.8	2 986.4
201	MEAT PRODUCTS. . . . .	283	151	17.4	167.7	13.9	27.3	122.8	303.2	1 708.6	2 006.6	19.1	18.0	258.7
2011	MEATPACKING PLANTS . . . . .	112	62	6.6	73.2	5.2	10.8	54.4	116.4	1 129.6	1 244.6	9.2	8.2	123.1
2016	POULTRY DRESSING PLANTS. . . . .	45	30	4.8	29.0	4.2	7.4	22.7	52.2	144.2	194.4	5.6	(NA)	(NA)
202	DAIRY PRODUCTS . . . . .	289	127	11.8	119.3	5.7	11.6	57.6	288.0	960.5	1 233.0	17.2	17.6	294.8
2024	ICE CREAM AND FROZEN DESSERTS. . . . .	58	23	1.5	13.7	1.2	2.3	10.4	24.6	79.6	104.4	3.8	1.8	27.2
2026	FLUID MILK . . . . .	191	86	9.1	94.6	3.7	7.6	39.8	231.4	767.5	984.6	11.5	14.7	249.2
203	PRESERVED FRUITS AND VEGETABLES. . . . .	452	267	50.8	371.0	44.0	79.9	299.5	991.8	1 563.0	2 585.3	61.3	(NA)	(NA)
2033	CANNED FRUITS AND VEGETABLES. . . . .	163	114	24.5	184.9	22.1	39.1	158.8	527.7	730.4	1 265.3	27.9	24.1	409.1
2034	DEHYDRATED FRUITS, VEGETABLES, SOUPS	89	41	6.0	42.4	5.0	9.6	32.3	90.0	205.4	316.6	7.5	6.0	83.4
2037	FROZEN FRUITS AND VEGETABLES. . . . .	29	29	7.9	48.2	7.1	12.4	39.8	106.0	156.9	266.6	7.9	(NA)	(NA)
2038	FROZEN SPECIALTIES . . . . .	57	31	4.6	34.9	3.8	7.5	24.3	79.2	184.2	263.2	(0)	(NA)	(NA)
204	GRAIN MILL PRODUCTS. . . . .	233	84	7.2	73.0	5.1	11.3	48.9	303.8	647.5	951.7	13.2	6.5	215.1
2041	FLOUR AND OTHER GRAIN MILL PRODUCTS.	15	8	.6	6.8	.5	1.1	4.6	25.9	74.8	99.9	1.0	.7	28.4
2044	RICE MILLING . . . . .	15	6	.5	5.9	.4	.9	4.3	32.1	98.3	134.7	.4	.6	25.0
2045	BLENDED AND PREPARED FLOUR . . . . .	18	8	.9	11.0	.7	1.6	8.2	73.1	61.2	132.1	(0)	EE	(0)
205	BAKERY PRODUCTS. . . . .	307	135	20.8	206.3	11.3	21.3	106.5	454.2	288.2	743.4	27.2	23.0	355.5
2051	BREAD, CAKE, AND RELATED PRODUCTS. . . . .	273	117	18.3	184.1	9.5	17.8	92.0	385.0	235.7	621.3	25.5	20.1	308.1
2052	COOKIES AND CRACKERS . . . . .	33	18	2.5	22.2	1.8	3.5	14.5	69.2	52.5	122.1	1.8	2.9	47.4
206	SUGAR AND CONFECTIONERY PRODUCTS . . . . .	134	64	10.2	78.1	7.9	14.3	58.2	265.7	473.4	741.8	19.3	(NA)	(NA)
2065	CONFECTIONERY PRODUCTS . . . . .	112	44	4.8	30.0	3.3	5.9	19.9	77.1	98.9	173.9	3.0	4.8	61.4
207	FATS AND OILS. . . . .	83	39	3.6	38.9	2.5	5.2	25.0	159.0	409.2	569.4	7.4	(NA)	(NA)
2077	ANIMAL AND MARINE FATS AND OILS. . . . .	42	14	1.1	13.6	.8	1.8	8.8	41.6	83.5	125.7	1.0	1.2	31.3
208	BEVERAGES. . . . .	350	175	17.9	180.6	9.6	19.1	89.7	778.8	937.5	1 639.8	57.8	16.4	481.7
2082	MALT BEVERAGES . . . . .	13	10	2.5	31.7	1.9	3.6	23.6	122.7	144.5	266.8	4.1	3.7	121.1
2084	WINES, BRANDY, AND BRANDY SPIRITS. . . . .	121	49	6.4	60.9	4.0	8.2	35.1	293.2	410.9	632.4	(0)	4.1	126.5
2086	BOTTLED AND CANNED SOFT DRINKS . . . . .	153	92	7.4	73.2	2.7	5.2	21.9	213.1	273.2	484.0	18.1	7.1	153.7
209	MISC. FOODS AND KINDRED PRODUCTS . . . . .	454	143	17.3	137.5	12.9	24.7	86.9	475.9	785.9	1 260.0	22.4	(NA)	(NA)
2092	FRESH OR FROZEN PACKAGED FISH. . . . .	24	13	1.5	7.6	1.3	2.1	5.6	17.2	39.2	56.4	.7	1.0	9.0
2095	ROASTED COFFEE . . . . .	23	14	1.3	14.9	.9	1.8	9.8	113.7	202.2	316.0	7.9	1.7	108.0
2097	MANUFACTURED ICE . . . . .	69	14	.9	6.5	.5	.9	3.3	10.7	5.7	16.3	2.0	.9	13.7
2098	MACARONI AND SPAGHETTI . . . . .	34	6	.8	7.0	.5	1.1	4.1	16.3	21.1	37.0	.6	CC	(0)
2099	FOOD PREPARATIONS, NEC . . . . .	287	89	8.7	69.5	6.0	16.1	40.0	250.2	241.9	490.9	9.1	8.9	165.2
22	TEXTILE MILL PRODUCTS. . . . .	263	129	12.4	90.4	9.7	19.8	62.6	232.4	324.7	549.5	26.2	8.2	111.3
225	KNITTING MILLS . . . . .	84	44	3.6	21.9	3.1	6.0	16.5	60.6	61.1	119.9	(0)	2.0	21.1
229	MISCELLANEOUS TEXTILE GOODS. . . . .	54	29	1.8	15.7	1.4	3.0	10.2	33.5	42.1	75.4	2.0	2.3	34.2
2293	PADDINGS AND UPHOLSTERY FILLING. . . . .	10	8	.3	3.1	.3	.6	2.3	6.0	6.8	12.8	(0)	.4	6.0
23	APPAREL, OTHER TEXTILE PRODUCTS. . . . .	2 751	1 007	81.8	449.5	70.1	126.8	327.4	883.6	957.6	1 820.9	23.7	67.0	561.6
232	MEN'S AND BOYS' FURNISHINGS. . . . .	206	109	11.6	62.0	9.8	18.4	47.4	130.2	132.0	254.8	3.1	9.5	86.1
2321	MEN'S AND BOYS' SHIRTS AND NIGHTWEAR	74	47	4.5	24.8	3.8	7.3	17.9	54.5	61.4	113.1	1.4	3.0	20.5
2329	MEN'S AND BOYS' CLOTHING, NEC. . . . .	38	20	2.1	10.9	1.8	3.2	8.3	23.5	14.2	34.2	.4	1.8	13.0
233	WOMEN'S, AND MISSES' OUTERWEAR . . . . .	1 441	596	41.2	222.4	35.5	62.5	160.9	464.9	510.7	968.3	11.7	33.1	290.2
2331	WOMEN'S, MISSES' BLOUSES, WAISTS . . . . .	136	80	4.7	25.8	4.1	7.4	18.1	72.6	88.8	159.4	6.9	4.1	26.9
2335	WOMEN'S AND MISSES' DRESSES. . . . .	943	307	21.3	108.4	18.3	31.1	80.6	211.2	195.0	404.2	2.5	13.0	127.9
2337	WOMEN'S AND MISSES' SUITS AND COATS.	153	90	6.1	36.0	5.3	9.4	26.4	72.2	100.6	172.5	.7	6.8	62.2
2339	WOMEN'S, MISSES' OUTERWEAR, NEC. . . . .	209	119	9.1	52.2	7.8	14.7	35.9	108.9	126.3	232.3	1.6	9.2	73.3
234	WOMEN'S, CHILDREN'S UNDERGARMENTS.	54	35	4.3	24.0	3.7	7.0	15.0	43.0	29.4	71.9	(0)	FF	(0)
2341	WOMEN'S AND CHILDREN'S UNDERWEAR . . . . .	27	17	1.8	9.7	1.7	3.4	7.1	18.1	12.1	29.8	(0)	EE	(0)
2342	BRASSIERES AND ALLIED GARMENTS . . . . .	27	18	2.4	14.3	2.0	3.7	7.9	24.9	17.3	42.1	.3	2.4	19.9
236	CHILDREN'S OUTERWEAR . . . . .	56	33	2.5	12.2	2.1	4.0	9.2	21.7	27.7	49.4	.4	1.9	15.1
2369	CHILDREN'S OUTERWEAR, NEC. . . . .	24	15	1.2	6.1	1.1	2.0	4.8	13.2	16.8	30.0	(0)	1.2	9.8
238	MISC. APPAREL AND ACCESSORIES. . . . .	95	30	2.0	12.0	1.6	2.9	7.8	22.5	21.9	44.4	.2	1.7	12.6
2386	LEATHER AND SHEEP LINED CLOTHING . . . . .	21	8	.5	3.4	.4	.8	2.3	8.6	8.4	17.1	(0)	(NA)	(NA)
239	MISC. FABRICATED TEXTILE PRODUCTS. . . . .	805	173	14.6	81.0	12.4	23.2	58.2	134.6	173.9	304.1	6.1	12.1	89.2
2391	CURTAINS AND DRAPERIES . . . . .	331	48	3.9	19.7	3.2	6.0	14.3	31.8	36.0	67.6	.8	3.4	20.2
2392	HOUSE FURNISHINGS, NEC . . . . .	115	34	3.5	20.0	3.0	5.8	13.6	37.8	54.7	88.7	1.7	2.9	25.1
2393	TEXTILE BAGS . . . . .	12	5	.5	3.7	.5	.9	2.5	7.2	14.4	21.4	.1	.6	5.1
2394	CANVAS AND RELATED PRODUCTS. . . . .	93	15	1.2	7.8	1.0	1.9	5.3	10.7	15.0	25.2	.3	1.2	8.9
2395	PLEATING AND STITCHING . . . . .	94	19	2.0	10.3	1.8	3.1	7.9	18.3	20.1	38.1	(0)	EE	(0)
2399	FABRICATED TEXTILE PRODUCTS, NEC . . . . .	114	39	2.6	14.4	2.3	4.1	10.6	20.7	27.3	48.4	(0)	2.2	16.5
24	LUMBER AND WOOD PRODUCTS . . . . .	2 231	612	62.5	539.7	53.8	106.8	435.3	1 129.5	1 516.0	2 627.3	87.9	(NA)	(NA)
2411	LOGGING CAMPS, LOGGING CONTRACTORS..	538	73	6.1	46.4	5.6	10.3	40.9	111.7	123.0	234.1	14.8	4.9	62.2
242	SAWMILLS AND PLANING MILLS . . . . .	399	162	21.0	200.6	18.5	38.7	171.0	471.9	596.9	1 060.8	42.4	20.0	235.2
2421	SAWMILLS AND PLANING MILLS, GENERAL.	302	151	19.9	194.4	17.5	37.0	165.9	459.7	583.2	1 035.0	41.9	19.6	232.0
2426	HARDWOOD DIMENSION AND FLOORING. . . . .	86	10	1.0	5.9	.9	1.6	4.8	11.3	12.9	24.2	.5	(NA)	(NA)
243	MILLWORK, PLYWOOD, STRUC. MEMBERS.	718	190	17.5	156.3	14.6	29.2	121.5	272.3	402.9	670.3	13.7	(NA)	(NA)
2431	MILLWORK . . . . .	323	97	8.7	76.9	7.4	14.7	58.3	136.7	234.3	369.6	6.3	(NA)	(NA)
2434	WOOD KITCHEN CABINETS. . . . .	292	47	3.7	34.0	3.0	5.8	25.8	52.5	38.6	90.7	1.6	(NA)	(NA)
2435	HARDWOOD VENEER AND PLYWOOD. . . . .	19	9	1.5	12.9	1.2	2.5	10.1	28.1	57.3	81.9	1.3	(NA)	(NA)
2436	SOFTWOOD VENEER AND PLYWOOD. . . . .	14	14	2.2	21.9	2.0	4.3	19.7	36.8	43.7	80.9	2.2	(NA)	(NA)
2439	STRUCTURAL WOOD MEMBERS, NEC . . . . .	70	23	1.4	10.6	1.0	2.0	7.6	18.3	28.9	47.2	2.3	(NA)	(NA)
244	WOOD CONTAINERS. . . . .	124	37	2.9	21.7	2.6	4.8	17.1	38.0	60.0	96.8	1.9	(NA)	(NA)
2448	WOOD PALLETS AND SKIDS . . . . .	29	15	1.0	7.2	.8	1.5	5.3	12.4	13.9	26.0	.4	(NA)	(NA)

See footnotes at end of table.

TABLE 3. General Statistics for the State, by Industry Groups and Industries: 1972 and 1967—Continued

(See appendix, Explanation of Terms)

Code	Industry	1972											1967	
		Establishments		All employees		Production workers			Value added by manufacture	Cost of materials <sup>1</sup>	Value of shipments <sup>1</sup>	Capital expenditures, 1967	All employees	Value added by manufacture
		Total	With 20 employees or more	Number	Payroll	Number	Man-hours	Wages	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(1,000)	(million dollars)
		(number)	(number)	(1,000)	(million dollars)	(1,000)	(million)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(1,000)	(million dollars)
245	WOOD BUILDINGS AND MOBILE HOMES. . .	83	74	7.9	63.7	6.7	12.8	47.5	115.0	216.5	329.4	7.5	(NA)	(NA)
2451	MOBILE HOMES. . . . .	76	69	7.5	60.3	6.4	12.1	45.4	109.2	208.6	316.2	6.8	(NA)	(NA)
2452	PREFABRICATED WOOD BUILDINGS. . . . .	7	5	.4	3.5	.3	.7	2.1	5.8	7.9	13.2	.7	(NA)	(NA)
249	MISCELLANEOUS WOOD PRODUCTS. . . . .	369	76	7.0	51.0	5.8	11.1	37.4	120.5	116.7	236.0	7.5	(NA)	(NA)
2499	WOOD PRODUCTS, NEC. . . . .	352	67	6.2	43.4	5.2	9.9	31.3	102.0	95.8	196.4	6.7	(NA)	(NA)
25	FURNITURE AND FIXTURES. . . . .	1 412	511	43.1	331.3	35.0	67.9	236.4	656.0	527.3	1 165.3	37.0	33.6	382.8
251	HOUSEHOLD FURNITURE. . . . .	830	330	28.9	207.7	24.1	45.9	151.1	398.0	363.1	749.8	19.2	(NA)	(NA)
2511	WOOD HOUSEHOLD FURNITURE. . . . .	370	112	9.0	59.0	7.7	14.6	44.1	113.7	93.2	201.7	9.0	(NA)	(NA)
2512	UPHOLSTERED HOUSEHOLD FURNITURE. . . . .	221	120	9.4	68.5	8.0	14.9	51.5	118.6	106.4	223.4	(D)	(NA)	(NA)
2515	MATTRESSES AND BEDSPRINGS. . . . .	113	44	4.0	34.6	3.1	6.2	23.1	65.7	77.2	142.2	1.7	3.4	41.3
252	OFFICE FURNITURE. . . . .	83	36	3.2	25.8	2.5	5.2	18.4	55.6	45.0	99.7	9.6	2.3	33.5
2531	PUBLIC BUILDING, RELATED FURNITURE. . . . .	44	17	2.3	19.0	1.7	3.5	13.1	32.7	28.5	58.3	1.2	3.8	44.3
254	PARTITIONS AND FIXTURES. . . . .	308	84	5.1	49.8	4.0	8.1	35.2	111.0	45.3	156.0	5.7	4.5	62.5
259	MISC. FURNITURE AND FIXTURES. . . . .	146	43	3.4	26.3	2.6	4.8	17.6	53.5	39.1	90.3	1.2	1.7	16.4
2591	DRAPERY HARDWARE, BLINDS, SHADES. . . . .	55	11	1.1	7.5	.8	1.5	4.4	15.9	12.0	27.5	.5	.7	6.8
2599	FURNITURE AND FIXTURES, NEC. . . . .	91	35	2.3	18.8	1.8	3.3	13.2	37.6	27.2	62.8	.7	.9	9.5
26	PAPER AND ALLIED PRODUCTS. . . . .	504	303	33.9	335.5	26.3	52.6	242.2	693.2	945.4	1 635.4	48.5	32.0	497.9
2631	PAPERBOARD MILLS. . . . .	17	15	2.3	26.3	1.9	4.0	21.3	57.3	66.3	123.5	7.3	2.5	44.2
264	MISC. CONVERTED PAPER PRODUCTS. . . . .	248	123	12.5	117.7	9.7	19.6	83.7	265.8	321.9	585.7	12.4	11.6	192.1
2642	ENVELOPES. . . . .	27	20	1.8	16.9	1.4	2.8	11.8	31.0	24.0	54.3	1.2	1.5	20.6
2643	BAGS, EXCEPT TEXTILE BAGS. . . . .	47	29	3.2	29.9	2.5	5.4	21.6	64.7	80.8	144.6	2.4	2.3	32.3
2645	DIE-CUT PAPER AND BOARD. . . . .	33	14	1.2	10.6	1.0	2.0	7.5	22.5	22.0	43.7	(D)	1.4	15.3
2646	PRESSED AND MOLDED PULP GOODS. . . . .	5	4	.7	7.2	.6	1.3	6.0	17.1	6.3	25.8	.5	EE	(D)
2649	CONVERTED PAPER PRODUCTS, NEC. . . . .	30	16	1.0	9.5	.7	1.5	5.8	22.6	22.1	44.1	(D)	(NA)	(NA)
265	PAPERBOARD CONTAINERS AND BOXES. . . . .	217	149	16.0	155.6	12.2	24.1	109.4	304.8	433.7	735.2	15.3	15.5	219.3
2651	FOLDING PAPERBOARD BOXES. . . . .	44	26	3.5	35.4	2.8	5.3	25.5	62.2	73.6	132.9	3.8	3.2	47.8
2652	SETUP PAPERBOARD BOXES. . . . .	25	18	.9	6.6	.8	1.5	4.8	11.0	7.0	17.8	.6	1.3	11.9
2653	CORRUGATED AND SOLID FIBER BOXES. . . . .	104	74	8.2	83.4	6.0	12.1	56.3	160.5	266.3	427.2	7.7	7.3	98.7
2654	SANITARY FOOD CONTAINERS. . . . .	23	19	2.5	22.9	2.0	3.8	17.2	55.4	65.1	120.1	(D)	3.0	50.2
2655	FIBER CANS, DRUMS, SIMILAR PRODUCTS. . . . .	21	12	.8	7.3	.7	1.4	5.6	15.7	21.7	37.2	(D)	.7	10.8
27	PRINTING AND PUBLISHING. . . . .	4 506	783	86.6	828.9	51.1	92.2	460.2	1 719.4	846.8	2 554.7	119.8	82.7	1 167.2
2711	NEWSPAPERS. . . . .	519	201	33.1	317.5	15.0	25.1	145.4	652.8	236.5	889.4	70.0	37.3	526.1
2721	PERIODICALS. . . . .	302	42	4.1	42.8	1.0	2.2	8.7	106.8	86.7	194.1	2.3	2.6	55.2
273	BOOKS. . . . .	197	48	4.9	43.9	1.7	2.9	12.6	134.4	61.4	194.6	3.6	3.1	49.2
2741	MISCELLANEOUS PUBLISHING. . . . .	324	34	3.7	28.5	2.5	4.1	16.0	69.6	23.4	91.8	2.6	FF	(D)
275	COMMERCIAL PRINTING. . . . .	2 582	322	29.1	286.5	22.2	40.7	199.8	524.1	327.4	837.2	31.5	(NA)	(NA)
2751	COMMERCIAL PRINTING, LITHOGRAPHIC. . . . .	1 524	118	13.8	124.3	10.6	19.3	88.3	231.2	144.1	374.3	12.8	(NA)	(NA)
2752	COMMERCIAL PRINTING, LITHOGRAPHIC. . . . .	996	192	14.6	154.9	10.9	20.1	106.5	277.7	177.8	454.1	18.3	(NA)	(NA)
2761	MANIFOLD BUSINESS FORMS. . . . .	78	40	3.7	35.9	2.7	5.3	25.1	93.4	69.0	162.6	4.3	3.9	77.9
2789	BOOKBINDING AND RELATED WORK. . . . .	120	19	1.5	10.0	1.3	2.5	7.8	13.7	4.0	22.1	1.0	1.5	14.1
279	PRINTING TRADE SERVICES. . . . .	313	48	3.0	36.1	2.2	4.2	25.9	58.4	9.7	67.9	2.0	(NA)	(NA)
2795	LITHOGRAPHIC PLATEMAKING SERVICES. . . . .	21	8	.5	7.4	.4	.7	5.4	10.7	2.8	13.5	(D)	(NA)	(NA)
28	CHEMICALS AND ALLIED PRODUCTS. . . . .	1 265	452	45.2	460.2	26.1	51.9	222.8	1 774.9	1 402.0	3 151.6	114.4	42.0	1 116.8
281	INDUSTRIAL INORGANIC CHEMICALS. . . . .	90	46	2.9	29.9	1.9	3.8	17.4	113.8	109.0	220.4	12.2	(NA)	(NA)
282	PLASTICS MATERIALS AND SYNTHETICS. . . . .	51	37	2.5	25.7	1.5	3.1	14.4	108.3	127.9	238.2	(D)	(NA)	(NA)
283	DRUGS. . . . .	134	57	9.3	96.5	4.8	9.6	35.3	277.5	142.3	412.3	18.4	FF	(D)
2834	PHARMACEUTICAL PREPARATIONS. . . . .	81	39	6.2	63.5	3.2	6.4	22.9	213.9	84.3	296.7	8.3	3.7	75.1
284	SOAPS, CLEANERS, AND TOILET GOODS. . . . .	338	99	11.2	115.4	6.7	13.4	57.2	618.3	355.0	965.5	16.8	(NA)	(NA)
2841	SOAP AND OTHER DETERGENTS. . . . .	94	30	3.8	42.2	2.6	5.1	26.3	238.7	166.0	403.6	(D)	3.6	153.3
2844	TOILET PREPARATIONS. . . . .	95	27	5.1	52.2	2.8	5.8	21.2	293.6	109.1	393.3	2.9	3.9	127.1
2851	PLANTS AND ALLIED PRODUCTS. . . . .	212	88	7.4	74.5	4.1	8.2	36.3	234.6	272.4	501.6	6.3	7.2	149.9
286	INDUSTRIAL ORGANIC CHEMICALS. . . . .	48	20	2.7	31.8	1.6	3.1	16.3	130.6	117.9	245.9	(D)	(NA)	(NA)
287	AGRICULTURAL CHEMICALS. . . . .	95	31	3.1	31.5	1.8	3.5	17.0	111.5	128.0	235.7	9.7	(NA)	(NA)
2873	NITROGENOUS FERTILIZERS. . . . .	8	5	.5	6.0	.3	.7	4.2	18.8	17.4	35.3	.6	(NA)	(NA)
2879	AGRICULTURAL CHEMICALS. . . . .	54	13	1.3	11.6	.7	1.3	5.7	38.6	53.9	91.4	(D)	(NA)	(NA)
289	MISCELLANEOUS CHEMICAL PRODUCTS. . . . .	297	74	6.1	55.1	3.7	7.1	29.1	180.3	149.5	331.9	14.6	(NA)	(NA)
2892	EXPLOSIVES. . . . .	10	5	.5	4.7	.3	.6	2.7	9.6	3.7	12.9	1.8	FF	(D)
2893	PRINTING INK. . . . .	48	13	.7	7.7	.4	.8	3.5	19.0	22.9	41.9	.5	1.2	14.5
2899	CHEMICAL PREPARATIONS, NEC. . . . .	185	32	3.6	30.6	2.2	4.2	16.6	110.5	79.6	193.5	10.1	(NA)	(NA)
29	PETROLEUM AND COAL PRODUCTS. . . . .	212	67	16.0	190.9	11.0	20.9	120.7	691.3	2 368.2	3 083.4	105.8	16.4	554.2
2911	PETROLEUM REFINING. . . . .	36	32	12.1	151.4	8.0	15.1	93.2	554.8	2 210.3	2 790.3	95.4	13.9	496.6
295	PAVING AND ROOFING MATERIALS. . . . .	117	21	3.2	31.7	2.6	4.9	24.0	91.4	106.8	197.4	8.8	1.8	36.8
2951	PAVING MIXTURES AND BLOCKS. . . . .	93	8	1.9	18.1	1.6	2.9	14.6	50.4	59.5	109.5	7.6	.8	22.1
2952	ASPHALT FELTS AND COATINGS. . . . .	24	13	1.3	13.6	1.0	2.0	9.4	41.0	47.4	87.9	1.2	1.0	14.7
299	MISC. PETROLEUM AND COAL PRODUCTS. . . . .	59	14	.8	7.8	.4	.9	3.5	45.0	51.0	95.8	1.6	(NA)	(NA)

See footnotes at end of table.



TABLE 3. General Statistics for the State, by Industry Groups and Industries: 1972 and 1967—Continued

(See appendix, Explanation of Terms)

Code	Industry	1972										1967		
		Establishments		All employees		Production workers			Value added by manufacture	Cost of materials <sup>1</sup>	Value of shipments <sup>1</sup>	Capital expenditures, new	All employees	Value added by manufacture
		Total	With 20 employees or more	Number	Payroll	Number	Man-hours	Wages						
		(number)	(number)	(1,000)	(million dollars)	(1,000)	(million)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(1,000)	(million dollars)
30	RUBBER AND MISC. PLASTICS PROD .	1 259	479	51.7	435.0	39.4	79.0	288.6	964.4	762.5	1 704.1	76.2	(NA)	(NA)
3079	MISCELLANEOUS PLASTICS PRODUCTS. . .	1 076	393	36.3	284.9	27.9	55.6	184.5	635.2	482.4	1 103.9	(D)	(NA)	(NA)
3111	LEATHER TANNING AND FINISHING. . . .	32	12	1.3	9.9	1.2	1.9	8.6	19.9	38.4	56.7	.7	.7	8.4
314	FOOTWEAR, EXCEPT RUBBER. . . . .	35	19	3.0	17.0	2.6	4.9	12.3	27.5	22.3	50.7	.7	2.4	18.1
3144	WOMEN'S FOOTWEAR, EXCEPT ATHLETIC. .	25	15	2.5	13.5	2.1	4.2	10.1	22.7	16.4	39.0	(D)	(NA)	(NA)
32	STONE, CLAY, AND GLASS PRODUCTS .	1 435	463	51.5	496.3	39.8	79.4	358.3	1 157.3	819.2	1 973.5	97.9	43.4	462.4
322	GLASS, GLASSWARE, PRESSED OR BLOWN	40	22	9.6	94.4	8.5	16.5	80.4	216.6	97.2	312.5	(D)	8.2	110.2
3241	CEMENT, HYDRAULIC. . . . .	16	14	3.8	45.7	3.1	6.1	36.2	133.0	73.9	208.3	8.2	3.6	95.4
325	STRUCTURAL CLAY PRODUCTS . . . . .	58	33	2.9	23.4	2.4	4.9	18.0	50.0	24.4	74.3	2.5	4.1	46.9
3251	BRICK AND STRUCTURAL CLAY TILE . . . .	17	10	.7	5.8	.6	1.1	4.5	11.2	4.4	15.4	.7	.7	6.1
326	POTTERY AND RELATED PRODUCTS . . . .	135	48	6.0	41.3	4.8	9.5	29.9	71.3	31.4	103.0	(D)	FF	(D)
3269	POTTERY PRODUCTS, NEC. . . . .	108	28	2.4	12.4	2.2	4.3	10.1	21.5	7.9	29.8	1.6	1.8	13.3
327	CONCRETE, GYPSUM, PLASTER PRODUCTS	756	228	15.1	157.8	9.9	19.7	97.6	357.5	379.7	738.7	27.5	13.2	218.6
3271	CONCRETE BLOCK AND BRICK . . . . .	73	28	1.3	13.3	.9	1.7	7.7	28.0	19.7	47.3	2.1	1.1	14.6
3273	READY-MIXED CONCRETE . . . . .	419	115	7.1	78.0	3.9	7.7	41.2	167.2	239.2	406.7	15.6	6.2	106.7
3281	CUT STONE AND STONE PRODUCTS . . . . .	60	10	.6	4.3	.5	1.0	3.3	7.9	4.5	12.2	.4	.5	5.3
329	MISC. NONMETALLIC MINERAL PRODUCTS	244	70	8.4	79.4	6.4	13.1	56.7	192.4	130.7	319.9	11.7	(NA)	(NA)
3295	MINERALS, GROUND OR TREATED. . . . .	38	13	1.2	13.0	1.0	2.1	10.0	37.5	22.0	57.8	1.9	.9	15.2
3299	NONMETALLIC MINERAL PRODUCTS, NEC. .	84	14	1.0	7.8	.8	1.5	5.2	16.2	9.0	24.9	(D)	.4	3.7
33	PRIMARY METAL INDUSTRIES . . . . .	707	348	45.9	456.8	35.6	70.4	329.5	814.8	1 247.1	2 021.0	62.0	58.8	933.3
331	BLAST FURNACE, BASIC STEEL PROD. . .	78	50	18.8	213.4	13.9	26.5	156.2	336.9	610.0	916.0	24.9	22.4	378.8
3312	BLAST FURNACES AND STEEL MILLS . . . .	30	20	15.3	176.3	11.2	20.6	129.4	257.1	476.4	705.2	22.4	FF	(D)
332	IRON AND STEEL FOUNDRIES . . . . .	102	69	7.2	64.0	6.1	12.0	49.4	107.3	74.9	179.7	4.6	8.0	94.3
3321	GRAY IRON FOUNDRIES. . . . .	61	41	4.1	35.4	3.5	7.0	28.0	60.6	48.0	107.7	2.5	4.2	44.0
3325	STEEL FOUNDRIES, NEC . . . . .	30	19	2.3	21.9	1.9	3.7	16.5	34.8	19.7	53.2	1.7	(NA)	(NA)
3341	SECONDARY NONFERROUS METALS. . . . .	47	21	1.7	15.6	1.2	2.4	9.3	35.1	136.6	171.7	2.2	1.6	27.8
335	NONFERROUS ROLLING AND DRAWING . . .	78	51	7.8	74.4	5.8	12.3	50.9	167.2	305.4	468.6	(D)	FF	(D)
336	NONFERROUS FOUNDRIES . . . . .	251	115	7.8	66.2	6.6	13.1	48.0	117.8	92.7	208.4	8.4	7.6	89.3
3361	ALUMINUM FOUNDRIES . . . . .	157	67	4.6	39.6	3.8	7.5	28.8	69.9	40.6	109.1	3.3	4.2	49.2
3398	METAL HEAT TREATING. . . . .	130	30	1.9	16.9	1.4	2.9	11.4	34.7	10.8	44.8	(D)	(NA)	(NA)
34	FABRICATED METAL PRODUCTS. . . . .	3 549	1 161	120.1	1 139.9	89.8	180.1	757.2	2 260.6	1 971.9	4 191.7	103.5	(NA)	(NA)
341	METAL CANS AND SHIPPING CONTAINERS	77	54	10.9	125.5	9.2	19.0	103.7	291.9	433.0	729.6	8.5	1.4	1.4
342	CUTLERY, HANDTOOLS AND HARDWARE. .	258	82	13.7	119.9	10.6	21.7	82.9	284.0	132.6	408.8	(D)	11.7	166.1
3423	HAND AND EDGE TOOLS, NEC . . . . .	66	18	1.9	15.6	1.6	3.1	12.1	41.8	24.1	73.5	3.1	2.1	36.0
344	FABRICATED STRUCTURAL METAL PROD .	1 124	388	31.3	305.6	22.5	43.2	194.8	563.4	601.0	1 154.7	20.1	33.9	460.3
3441	FABRICATED STRUCTURAL METAL PRODUCTS	181	83	8.0	87.0	5.8	10.7	58.0	143.1	159.5	302.5	4.1	8.9	111.0
3442	METAL DOORS, SASH, AND TRIM. . . . .	195	80	7.4	58.1	5.4	10.7	35.7	113.5	131.1	241.9	4.7	6.3	63.2
3443	FABRICATED PLATEWORK (BOILERS SHOP). .	153	71	5.0	54.3	3.6	7.2	36.1	95.6	106.9	198.6	3.1	5.7	93.8
3444	SHEET METALWORK. . . . .	390	104	6.5	61.5	4.7	9.0	39.5	120.5	115.9	235.5	4.7	6.7	95.9
345	SCREW MACHINE PRODUCTS, BOLTS, ETC	249	81	9.0	89.1	6.7	13.7	55.1	170.1	83.7	254.8	(D)	12.1	195.7
3451	SCREW MACHINE PRODUCTS . . . . .	172	38	2.9	25.8	2.3	4.7	17.6	49.6	24.4	73.6	(D)	4.4	63.9
3452	BOLTS, NUTS, RIVETS, AND WASHERS . .	77	43	6.2	63.3	4.4	9.0	37.6	120.6	59.3	181.2	(D)	7.7	131.8
346	METAL FORGINGS AND STAMPINGS . . . .	324	125	8.8	83.9	6.9	14.1	59.5	162.7	142.9	302.5	8.1	(NA)	(NA)
3465	AUTOMOTIVE STAMPINGS . . . . .	6	5	.5	4.3	.4	.8	3.2	8.6	9.5	18.3	(D)	(NA)	(NA)
3466	CROWNS AND CLOSURES. . . . .	6	6	.5	5.1	.4	.9	3.8	14.0	11.0	24.3	1.2	(NA)	(NA)
3469	METAL STAMPINGS, NEC . . . . .	272	91	5.8	51.7	4.6	9.4	36.5	91.1	66.9	157.3	(D)	(NA)	(NA)
347	METAL SERVICES, NEC. . . . .	735	169	11.5	90.2	9.4	18.9	65.1	161.9	70.9	232.4	8.5	11.4	128.6
349	MISC. FABRICATED METAL PRODUCTS. .	636	198	19.1	174.9	13.7	27.2	109.6	361.3	277.1	623.1	23.8	(NA)	(NA)
3494	VALVES AND PIPE FITTINGS . . . . .	102	50	7.1	71.8	4.7	9.7	41.9	147.0	90.6	226.4	6.9	7.1	108.2
3495	WIRE SPRINGS . . . . .	34	26	1.8	14.7	1.5	2.8	10.6	25.6	17.9	44.2	.5	(NA)	(NA)
3496	MISC. FABRICATED WIRE PRODUCTS . . .	155	37	2.4	19.6	2.0	3.9	13.7	41.3	36.8	77.6	(D)	(NA)	(NA)
35	MACHINERY, EXCEPT ELECTRICAL. . .	5 292	1 028	131.3	1 396.5	80.0	160.3	696.4	2 598.4	1 813.8	4 332.8	148.0	123.1	1 790.2
352	FARM AND GARDEN MACHINERY. . . . .	150	30	2.2	17.7	1.7	3.3	11.7	35.3	37.4	72.1	1.2	(NA)	(NA)
353	CONSTRUCTION AND RELATED MACHINERY	275	113	14.9	157.9	9.6	18.3	86.1	369.0	264.7	622.0	17.1	11.6	196.4
3534	ELEVATORS AND MOVING STAIRWAYS . . .	18	8	1.0	8.3	.7	1.3	4.7	17.2	16.1	32.7	(D)	.7	10.6
3535	CONVEYORS AND CONVEYING EQUIPMENT. .	42	18	1.5	17.9	.8	1.6	7.7	35.5	31.8	68.8	.3	1.1	19.0
354	METALWORKING MACHINERY . . . . .	864	147	11.3	116.1	8.5	17.5	79.7	203.5	102.9	300.9	11.5	13.3	218.2
3541	MACHINE TOOLS, METAL CUTTING TYPES .	106	17	1.6	16.7	1.1	2.3	10.0	26.7	16.5	45.6	(D)	2.2	34.8
3544	SPECIAL DIES, TOOLS, JIGS & FIXTURES	548	80	5.7	60.8	4.5	9.5	44.7	103.1	36.7	137.9	6.3	6.5	107.9
3549	METALWORKING MACHINERY, NEC. . . . .	52	13	.9	8.7	.6	1.2	5.0	18.6	14.9	32.2	1.7	(NA)	(NA)
356	GENERAL INDUSTRIAL MACHINERY . . . .	419	129	15.7	151.5	9.7	19.6	82.0	284.1	235.6	512.5	10.0	15.0	214.0
3562	BALL AND ROLLER BEARINGS . . . . .	9	4	.4	4.1	.2	.4	2.2	7.9	3.6	11.3	.2	.7	10.0
3567	INDUSTRIAL FURNACES AND OVENS. . . . .	41	10	1.1	11.9	.6	1.4	5.4	26.9	13.9	40.2	.8	.8	(D)
3569	GENERAL INDUSTRIAL MACHINERY, NEC. .	103	36	3.1	27.8	2.1	4.0	15.1	55.0	41.0	93.8	2.5	2.8	37.8
357	OFFICE AND COMPUTING MACHINES. . . .	230	135	41.6	512.3	18.5	37.7	160.2	891.8	630.7	1 484.5	71.9	FF	(D)
3573	ELECTRONIC COMPUTING EQUIPMENT . . .	169	113	37.5	467.7	16.5	34.4	147.3	812.8	574.2	1 354.9	(D)	FF	(D)
358	REFRIGERATION, SERVICE MACHINERY . .	211	71	8.7	81.0	5.6	11.0	45.2	156.7	166.5	318.0	5.6	7.2	101.1

See footnotes at end of table.

TABLE 3. General Statistics for the State, by Industry Groups and Industries: 1972 and 1967—Continued

(See appendix, Explanation of Terms)

Code	Industry	1972											1967	
		Establishments		All employees		Production workers			Value added by manufacture	Cost of materials <sup>1</sup>	Value of shipments <sup>1</sup>	Capital expenditures, new	All employees	Value added by manufacture
		Total	With 20 employees or more	Number	Payroll	Number	Man-hours	Wages						
		(number)	(number)	(1,000)	(million dollars)	(1,000)	(million)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(1,000)	(million dollars)
359	MISC. MACHINERY, EXCEPT ELECTRICAL	2 747	268	22.3	206.2	17.6	35.2	149.6	435.4	187.4	619.0	23.6	(NA)	(NA)
36	ELECTRIC, ELECTRONIC EQUIPMENT	2 225	885	180.2	1 881.1	107.8	213.2	885.7	3 378.6	2 034.8	5 385.7	168.3	(NA)	(NA)
361	ELECTRIC DISTRIBUTING EQUIPMENT	91	39	6.2	53.1	4.4	8.9	32.5	110.7	85.9	198.7	4.5	(NA)	(NA)
3621	MOTORS AND GENERATORS	62	23	3.0	26.6	1.9	3.8	15.1	48.7	38.8	88.8	(D)	5.4	78.9
363	HOUSEHOLD APPLIANCES	53	20	5.8	49.5	4.4	8.4	32.9	122.8	111.8	231.0	(D)	5.5	86.3
364	ELECT. LIGHTING AND WIRING EQUIP.	296	126	12.8	106.0	9.7	18.8	65.1	229.9	174.3	392.1	(D)	9.5	124.6
3645	RESIDENTIAL LIGHTING FIXTURES	122	47	4.3	32.0	3.4	6.9	20.4	70.3	56.8	125.3	2.5	(NA)	(NA)
3652	PHONOGRAPH RECORDS	152	39	5.4	39.5	4.1	7.4	25.2	86.5	55.2	146.7	5.6	2.2	32.3
366	COMMUNICATION EQUIPMENT	440	229	75.7	946.2	37.1	73.5	371.6	1 525.5	878.4	2 443.9	(D)	99.0	1 513.6
367	ELECTRONIC COMPONENTS AND ACCESS.	650	278	56.0	531.8	35.9	71.9	268.2	1 001.7	443.7	1 395.1	74.4	59.4	701.0
369	MISC. ELECTRICAL EQUIP., SUPPLIES	267	47	5.8	48.3	4.2	8.4	31.7	104.4	91.6	190.3	6.4	4.9	64.9
3691	STORAGE BATTERIES	34	17	2.3	22.3	1.9	3.9	17.0	53.4	57.9	107.6	4.3	1.9	31.4
3694	ENGINE ELECTRICAL EQUIPMENT	33	12	1.5	11.2	1.1	2.2	7.1	22.0	13.3	34.3	4	1.4	16.0
37	TRANSPORTATION EQUIPMENT	1 543	595	269.9	3 425.6	164.3	320.8	1 679.5	6 736.0	5 888.2	12 060.9	162.4	(NA)	(NA)
371	MOTOR VEHICLES AND EQUIPMENT	522	203	39.6	421.5	32.3	65.1	318.1	1 126.9	2 908.7	4 009.7	43.5	33.2	639.1
3714	MOTOR VEHICLE PARTS AND ACCESSORIES	350	119	11.0	88.0	8.7	16.7	61.9	207.6	202.9	400.3	14.4	6.4	76.6
3715	TRUCK TRAILERS	29	17	2.4	21.8	1.8	3.4	14.2	42.5	64.4	103.0	1.2	1.4	16.4
3728	AIRCRAFT EQUIPMENT, NEC.	257	99	39.8	461.0	27.2	56.5	280.3	871.2	427.0	1 229.6	18.6	(NA)	(NA)
373	SHIP, BOAT BUILDING, REPAIRING	294	80	14.1	132.6	12.0	22.4	105.1	198.7	159.4	354.7	14.9	14.3	177.0
379	MISC. TRANSPORTATION EQUIPMENT	243	118	12.4	98.7	10.3	20.1	74.2	194.3	282.2	471.1	6.1	(NA)	(NA)
38	INSTRUMENTS AND RELATED PRODUCTS	1 078	329	48.2	481.9	29.5	59.1	231.9	969.0	543.6	1 477.5	46.5	(NA)	(NA)
3811	ENGINEERING, SCIENTIFIC INSTRUMENTS	130	43	5.8	60.9	3.5	7.0	30.3	121.4	73.6	198.4	(D)	FF	(D)
382	MEASURING AND CONTROLLING DEVICES	323	111	22.7	241.7	13.3	27.3	110.4	427.9	233.5	641.7	21.1	(NA)	(NA)
3832	OPTICAL INSTRUMENTS AND LENSES	99	35	4.0	41.5	1.9	4.0	16.1	114.8	54.6	167.5	4.7	(NA)	(NA)
384	MEDICAL INSTRUMENTS AND SUPPLIES	313	79	10.0	82.9	7.0	13.7	44.6	202.6	111.3	300.4	10.0	6.4	94.5
3841	SURGICAL AND MEDICAL INSTRUMENTS	84	20	3.4	28.0	2.5	5.1	15.7	67.4	33.7	98.8	3.1	2.8	43.6
3842	SURGICAL APPLIANCES AND SUPPLIES	125	39	4.5	37.8	3.1	5.9	20.0	87.5	53.0	135.6	(D)	2.7	37.3
3843	DENTAL EQUIPMENT AND SUPPLIES	104	20	2.1	17.1	1.4	2.7	8.8	47.7	24.6	66.0	(D)	.9	13.6
3851	OPHTHALMIC GOODS	65	17	1.4	9.7	1.1	2.0	6.2	21.0	8.6	28.5	2.1	.5	5.6
39	MISC. MANUFACTURING INDUSTRIES	1 650	319	34.7	262.0	25.3	47.0	157.1	560.7	410.7	953.3	18.6	30.9	374.7
391	JEWELRY, SILVERWARE, PLATED WARE	163	19	1.6	14.4	1.3	2.3	10.4	32.0	23.4	54.0	(D)	1.2	18.2
3911	JEWELRY, PRECIOUS METAL	129	15	1.4	12.5	1.1	1.9	9.1	27.1	19.8	46.2	.5	.9	15.8
3931	MUSICAL INSTRUMENTS	38	8	2.7	21.2	1.7	3.4	12.6	42.2	29.1	63.7	(D)	1.9	15.8
394	TOYS AND SPORTING GOODS	352	90	13.4	99.6	9.5	17.6	54.6	229.1	194.7	421.8	8.1	13.2	177.6
3949	SPORTING AND ATHLETIC GOODS, NEC.	224	59	5.6	39.0	4.5	8.5	27.5	85.2	75.9	157.2	5.2	4.0	48.3
395	PENS, PENCILS, OFFICE, ART GOODS	119	28	3.2	25.1	2.4	4.6	16.0	66.0	38.6	99.8	2.5	2.9	28.2
396	COSTUME JEWELRY AND NOTIONS	124	23	1.8	9.8	1.5	3.1	6.9	21.5	14.3	35.7	1.2	1.4	13.1
3961	COSTUME JEWELRY	63	12	.8	4.9	.7	1.4	3.3	10.9	5.9	16.9	.3	.5	4.1
3964	NEEDLES, PINS, AND FASTENERS	9	5	.5	2.3	.5	1.0	1.9	4.9	4.4	9.2	.7	88	(D)
399	MISCELLANEOUS MANUFACTURES	854	151	11.9	91.9	8.8	16.0	56.6	169.9	110.6	278.3	5.8	10.3	121.8
3993	SIGNS AND ADVERTISING DISPLAYS	321	56	4.8	44.6	3.3	5.8	26.1	72.6	39.9	111.6	2.0	4.7	63.5
3995	BURIAL CASKETS	24	14	.6	4.4	.5	1.0	3.3	7.6	8.9	16.5	.1	(NA)	(NA)
3999	MANUFACTURING INDUSTRIES, NEC.	465	71	5.7	36.5	4.5	8.1	23.5	77.4	51.0	127.4	3.2	4.2	43.7
--	ADMINISTRATIVE AND AUXILIARY	842	397	60.8	850.5	-	-	-	-	-	-	-	45.9	-

Note: The following symbols indicate employment size range for 1967:

AA less than 250 employees      EE 1,000 to 2,499 employees  
 BB 250 to 499 employees      FF 2,500 employees and over  
 CC 500 to 999 employees

- Represents zero. (NA) Not available. Because of a revision to this industry group in the 1972 edition of the SIC manual, 1967 census data are not available on a comparable basis. (D) Withheld to avoid disclosing figures for individual companies.

<sup>1</sup>The total cost of materials and value of shipments for industry groups shown may include extensive duplication arising from shipments between establishments in the same industry classification. (For a more complete explanation, see appendix.)

<sup>2</sup>Includes figures for industry groups which have been withheld from publication in order to (a) avoid disclosing figures for individual companies or (b) permit further checking of figures for smaller industry groups. Additional detail will appear in the final report for this State.



## Appendix A. SCOPE AND COVERAGE

This report is one of a series presenting preliminary information, by State, from the 1972 Census of Manufactures. The data will be superseded in a final report which, in turn, will be included in *Volume III, Area Statistics, 1972 Census of Manufactures*. The final report will include a comprehensive discussion of the concepts and definitions used in the census.

The census of manufactures covers each manufacturing establishment in the United States with one paid employee or more; manufacturing establishments with no employees are excluded. Firms which operated more than one establishment were required to file a separate report for each location. Companies which engaged in distinctly different lines of activity at one location were asked to submit separate reports if the company records permitted such a separation and the activities were of significant size.

This report includes figures for administrative offices, warehouses, garages, or other auxiliary units which service manufacturing establishments.

In the 1972 census, the approximately 120,000 manufacturing establishments with fewer than 10 employees were excused from filing reports. Under special arrangements which safeguarded the confidentiality of both tax and census records, data on payrolls, sales, and industry classification from the administrative records of the Social Security Administration and the Internal Revenue Service were made available to the Census Bureau for use in the 1972 Economic Censuses (retail and wholesale trade, service industries, construction industries, manufactures, and mineral industries). Estimates for data other than payrolls and sales for these small establishments were constructed from industry averages. The effect on industry aggregates is slight in most industries. For manufacturing as a whole, these small establishments account for less than 3 percent of the payrolls and value added.

Establishments are classified by industry in accordance with industry definitions described in the 1972 edition of the Standard Industrial Classification (SIC) Manual. For 1972, the SIC was significantly revised and the comparability with prior year's data for some industries was significantly affected. The comparability at the 2- and 3-digit SIC levels was less affected. The final volumes of the 1972 Census of Manufactures will contain a table relating aggregates based on the 1972 SIC with aggregates derived from classifying establishments according to the 1967 SIC definitions.

As in earlier censuses, a number of small establishments may have been misclassified as to industry. However, such possible misclassifications have significant effect on *none* of the statistics except the number of establishments. As indicated above, report forms were not mailed to very small establishments (fewer than 10 employees). The industry classifications for these establishments were assigned on the basis of brief descriptions of the general activity of the establishment. Where the description is incomplete or there are relatively fine lines of demarcation among industries or between manufacturing and nonmanufacturing activity, the code assigned to an establishment could differ from that which would have been assigned on the basis of more complete product information. Therefore, the total establishment count for individual industries should be viewed as an approximation rather than a precise measurement. The counts for establishments with 20 employees or more are more reliable than the total number of establishments.

More detailed figures for this State will appear in the final census reports. Final reports will also include a comprehensive discussion of such concepts as "industry" and "establishment," as well as the various statistical items such as "employment," "value of shipments," and "value added." Similar preliminary and final reports will be issued for other States during the coming months. A series of preliminary summary reports showing U.S. totals for each manufacturing industry and for each State are being issued. Final industry reports and final area reports will be published during 1974.

Order forms describing the individual reports and listing their prices may be obtained from any U.S. Department of Commerce district office or from the Publications Distribution Section, Social and Economic Statistics Administration, Washington, D.C. 20233.

The 1972 Census of Manufactures is the 29th census of manufacturing establishments in the United States. For 1972, it was conducted jointly with the censuses of mineral industries, construction industries, retail trade, wholesale trade, and selected services under authority of Title 13 of the United States Code. Title 13 specifies that a census of manufactures be conducted every 5 years and, as amended, to cover years ending in "2" and "7". Title 13 also authorizes an annual sample survey of manufacturing establishments in interim years.



## Appendix B. EXPLANATION OF TERMS

*(For a more complete discussion of these terms and the method of compiling the Census of Manufactures, see the "Introduction" to the 1967 Census of Manufactures, Volume III).*

**All Employees**—All full-time and part-time employees on the payrolls of operating manufacturing establishments for any part of the pay period ending nearest the 12th of the months specified on the report form. Included are all persons on paid sick leave, paid holidays, and paid vacations during these pay periods. Officers of corporations are included as employees; proprietors and partners of unincorporated firms are excluded. The "all employee" number is the average number of production workers for the midmonth payroll period of March, May, August, and November plus the number of nonproduction employees in mid-March.

**Number of Production Workers**—Workers (up through the working foreman level) engaged in fabricating, processing, assembling, inspecting, receiving, packing, warehousing, shipping (but not delivering), and maintenance, repair, janitorial, and watchman services, product development, auxiliary production for plant's own use (e.g., powerplant), recordkeeping, and other closely associated services. Proprietors and partners are excluded.

**Payroll**—This item includes all forms of compensation such as salaries, wages, commissions, dismissal pay, bonuses, vacation and sick leave pay, and compensation in kind, prior to such deductions as employees' Social Security contributions, withholding taxes, group insurance, union dues, and savings bonds. The total includes salaries of officers of these establishments, if a corporation; it excludes payments to the proprietor or partners, if an unincorporated concern. Respondents were told that in reporting they could follow the definition of payrolls used for calculating the Federal withholding tax.

**Man-Hours of Production Workers**—This total relates to production-worker man-hours worked or paid for at the plant including actual overtime hours (not straight-time equivalent hours). It excludes hours paid for vacation, holidays, or sick leave when the employee was not at the plant.

**Cost of Materials**—The term "Cost of Materials" refers to charges actually paid or payable for items consumed or put into production during the year, including freight and other direct charges incurred by the establishment in acquiring these materials. It includes the cost of materials or fuel consumed regardless of

whether these items were purchased by the establishment from other companies, transferred to it from other establishments of the same company, or withdrawn from inventory during the year. The establishment was requested to value materials transferred from other parts of the company at its approximate market value, not at cost of production. The important components of this cost item are (a) all raw materials, semifinished goods, parts, components, containers, scrap, and supplies put into production or used as operating supplies and for repair and maintenance during the year; (b) electric energy purchased; (c) fuels consumed for heat, power, or the generation of electricity; (d) work done by others on materials or parts furnished by manufacturing establishments (contract work); and (e) products bought and resold in the same condition.

**Value of Shipments**—The value of shipments is the received or receivable net selling value, f.o.b. plant (exclusive of freight and taxes), of all products shipped, both primary and secondary, as well as all miscellaneous receipts such as receipts for contract work performed for others, installation and repair, sales of scrap, and sale of products bought and resold without further processing. Included are all items made by the establishment or for it under contract from materials owned by it whether sold, transferred to other plants of the same company, or shipped on consignment. The net selling value of products made in one plant on a contract basis from materials owned by another was reported by the plant providing the materials.

In the case of multiunit companies, the manufacturer was requested to report the value of products transferred to other establishments of the same company at full economic value; i.e., to include not only the direct costs of production but also a reasonable proportion of "all other costs" (including company overhead) and profit.

**Duplication in Cost of Materials and Value of Products**—The aggregate cost of materials and value-of-shipments figures for industry groups and for all manufacturing industries may include large amounts of duplication since the products of some industries are used as materials by others. With some important exceptions, such as motor vehicles and parts, this duplication is not significant within individual industries but arises from the addition of the totals of related industries in successive stages of the production of a finished manufactured product. Examples are the addition of flour mills to bakeries in the food group and the addition of pulp mills to paper mills in the paper and allied products group of industries. Esti-



mates of this duplication indicate that the value of manufactured products exclusive of such duplication—the value of finished manufactures—approximates two-thirds of the total value of products.

Prior to 1962, the Bureau of the Census did not publish figures for cost of materials or value of shipments if they contained significant duplication. Effective with the 1962 annual survey these figures were shown at all industry levels for the United States to meet the requests for their use in studies in which the presence of an indeterminate amount of duplication is not a limiting factor. However, they are appropriately footnoted. Effective with the 1964 annual survey, these industry group totals are also shown at the State, standard metropolitan statistical area, and large-county level.

Even where there is no significant amount of duplication, value-of-shipments figures are deficient as measures of the relative economic importance of individual manufacturing industries or geographic areas because of the wide variation in ratio of materials, labor, and other processing costs to value of shipments among industries.

**Value Added by Manufacture**—This measure of manufacturing activity is derived by subtracting the cost of materials, supplies, containers, fuel, purchased electricity, and cost of resales contract work from the value of shipments for products manufactured plus resales and receipts for services rendered. The result of this calculation is adjusted by the net change in finished goods and work-in-process inventories between the beginning and end of the year. (In the few industries that report value of production rather than value of shipments, only changes in work-in-process inventories are used to adjust value added. In the shipbuilding and repairing industry, no inventory adjustment is made.)

"Value added" avoids the duplication in the value of shipments figure which results from the use of products of some establishments as materials by others. Value added is considered to be the best value measure available for comparing the relative economic importance of manufacturing among industries and geographic areas.

**Expenditures for Plant and Equipment**—Manufacturing establishments in operation and establishments under construction but not yet in operation, were asked to report their expenditures for (a) permanent additions and major alterations to the manufacturing establishment, and (b) new machinery and equipment used for replacement purposes and additions to plant capacity if they are of the type for which depreciation accounts are ordinarily maintained.

These totals exclude expenditures for new facilities and equipment leased from nonmanufacturing concerns; new facilities owned by the Federal Government but operated under contract by private companies; and plant and equipment furnished to the manufacturer by communities and nonprofit organizations. Expenditures for used plant and equipment (although reported in the census), expenditures for land, and cost of maintenance and repairs charged as current operating expense are also omitted from the figures for new capital expenditures.

**Central Administrative Offices and Auxiliary Units**—In the 1972 census as in previous years, respondents were asked to file separate reports for central administrative offices or auxiliary units which were (1) at different locations from the establishments served or, (2) at the same location as one of these establishments but were not operated as an integral part thereof and served two or more establishments. The functions of employees in central administrative offices include general company policy determination, planning and management (that is, company purchasing, accounting, general engineering, direction of company personnel matters, and legal and patent matters). Auxiliaries are storage facilities, garages, repair shops, purchasing offices, sales promotion offices, and research laboratories serving the plants or central management of the company.

**Standard Metropolitan Statistical Areas**—Standard metropolitan statistical areas (SMSA) are integrated economic and social units with a large volume of daily travel and communication between the central city and outlying parts of the area.<sup>1</sup> Each area (except in New England) consists of one whole county or more. An area may contain not only highly industrialized counties but also adjoining counties which, though primarily residential in character, contribute significantly to the industrial counties' labor force and are socially and economically integrated with the central city. These areas are defined by the Federal Committee on Standard Metropolitan Statistical Areas of the Office of Management and Budget for general-purpose use throughout the Federal Government in presenting economic and social data. In the New England States, similar intergration criteria are applied in defining

<sup>1</sup> Each standard metropolitan statistical area must include either (1) a city with 50,000 or more inhabitants, or (2) a city having a population of at least 25,000 which (a) with the addition of the population of contiguous places has a population density of at least 1,000 persons per square mile; (b) constitutes, for general economic and social purposes, a single community with a combined population of at least 50,000; and (c) includes a total population of at least 75,000 in the county or counties in which the city and contiguous places are located.

SMSA's on a city and town basis because towns rather than counties are regarded as the significant unit in this region of the country.

The requirement that each SMSA consist of county units (except in New England) sometimes results in the inclusion in an area of considerable amount of territory which would not ordinarily be considered "metropolitan," much less "industrial." It is recognized that metropolitan areas could be more accurately defined in terms of smaller area segments such as minor civil

divisions, but the usefulness of areas so defined would be limited by the fact that many types of economic and social data are available only on a county basis.

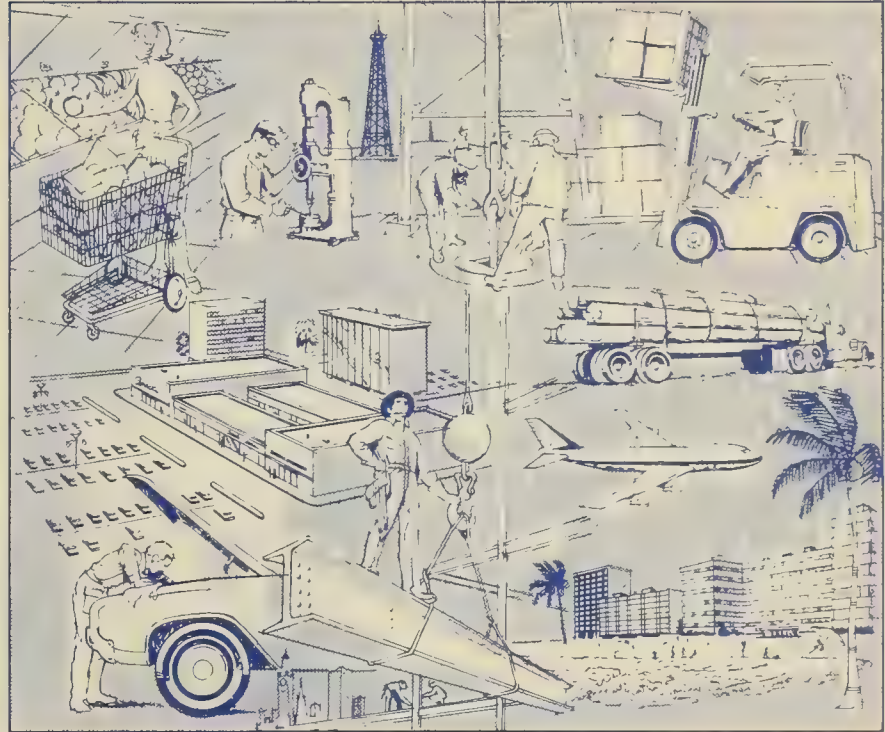
Each SMSA is designated by the name of the principal city of the area. In addition to the name of the principal city, the area title may include one or two additional city names.

The data for SMSA's which changed definition since the 1967 census have not been retabulated on the new basis for years prior to 1972.



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# 1972 CENSUS OF MANUFACTURES

AREA SERIES

C72(P)-S6

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## Colorado

Value added by manufacturing in 1972 in the State of Colorado amounted to \$2,455 million, an 18-percent increase from 1971 and a 63-percent increase from 1967.

This report presents preliminary results from the 1972 Census of Manufactures for the State, its Standard Metropolitan Statistical Areas, and its counties.

Data are provided for industry groups within the State. Historical data, back to 1958, are included for the State as a whole,

and 1967 figures on employment and value added are provided for the smaller areas.

The figures in this report have been subjected to only preliminary review and must be regarded as approximations of the final census figures. No adjustments have been made in the value figures for changes in price level.

For an explanation of the terms used in the tables, see the appendix at the end of this report.

TABLE 1. General Statistics for the State: 1972 and Earlier Years

(See appendix, Explanation of Terms)

Year	Establishments		All employees <sup>1</sup>		Production workers			Value added by manufacture	Cost of materials <sup>2</sup>	Value of shipments <sup>2</sup>	Capital expenditures, new
	Total	With 20 employees or more	Number	Payroll	Number	Man-hours	Wages				
	(number)	(number)	(1,000)	(million dollars)	(1,000)	(millions)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(million dollars)
COLORADO											
1972 Census .....	2,807	816	125.6	1,201.9	86.5	172.4	752.6	2,455.0	3,376.7	5,803.2	230.2
1971 ASM .....	(NA)	(NA)	116.9	1,071.6	78.4	155.4	646.0	2,088.5	2,590.9	4,699.1	238.3
1970 ASM .....	(NA)	(NA)	117.1	979.0	79.6	157.7	596.1	1,947.0	2,269.7	4,172.3	222.9
1969 ASM .....	(NA)	(NA)	110.6	883.9	75.2	152.5	544.1	1,880.4	2,032.1	3,888.1	155.1
1968 ASM .....	(NA)	(NA)	102.5	789.2	70.5	144.7	490.1	1,627.7	1,923.4	3,533.7	137.6
1967 Census .....	2,461	664	104.0	730.5	71.2	143.4	444.8	1,509.2	1,733.0	3,226.6	99.6
1966 ASM .....	(NA)	(NA)	104.1	707.8	73.4	147.4	442.3	1,457.9	1,666.0	3,091.1	130.5
1965 ASM .....	(NA)	(NA)	96.2	624.1	67.0	134.0	391.5	1,210.5	1,460.6	2,607.6	84.6
1964 ASM .....	(NA)	(NA)	90.3	591.0	61.9	124.7	364.1	1,152.7	1,355.2	2,503.1	63.7
1963 Census .....	2,453	593	93.7	596.0	64.0	128.5	369.1	1,193.8	(NA)	(NA)	68.0
1962 ASM .....	(NA)	(NA)	94.3	587.4	64.7	133.7	370.4	1,151.8	(NA)	(NA)	83.1
1961 ASM .....	(NA)	(NA)	92.5	548.6	62.9	129.0	340.8	984.1	(NA)	(NA)	59.1
1960 ASM .....	(NA)	(NA)	88.8	510.8	61.4	125.3	321.7	931.2	(NA)	(NA)	60.4
1959 ASM .....	(NA)	(NA)	84.6	462.9	58.6	119.6	295.9	858.4	(NA)	(NA)	41.8
1958 Census .....	2,274	535	77.5	405.0	55.1	112.0	265.2	781.9	(NA)	(NA)	50.7

Note: "ASM" data are based on a representative sample of manufacturing establishments canvassed in the Annual Survey of Manufactures. These estimates may differ from the results of a complete canvass of all manufacturing establishments. The standard errors associated with these estimates are published in the annual survey of manufactures volumes for this period. For comparative purposes, the 1972 ASM estimate for the State of Colorado was 121 thousand employees, and \$2,361 million in value added with corresponding standard error of estimate of 3 and 3.

(NA) Not available.

<sup>1</sup>Includes employment and payroll at central administrative offices and auxiliary units. (For a definition of these units, see appendix.)

<sup>2</sup>The total cost of materials and value of shipments may include extensive duplication arising from shipments between establishments in the same industry classification. (For a more complete explanation, see appendix.)

TABLE 2. General Statistics for the State, Standard Metropolitan Statistical Areas, and Counties: 1972 and 1967

(See appendix, Explanation of Terms)

State, standard metropolitan statistical areas, and counties <sup>1</sup>	1972											1967	
	Establishments		All employees <sup>2</sup>		Production workers			Value added by manufac- ture	Cost of materials <sup>3</sup>	Value of shipments <sup>3</sup>	Capital expendi- tures, new	All employees	Value added by manufac- ture
	Total	With 20 employees or more	Number	Payroll	Number	Man-hours	Wages						
	(number)	(number)	(1,000)	(million dollars)	(1,000)	(million)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(1,000)	(million dollars)
COLORADO, TOTAL. . . . .	2 807	816	125.6	1 201.9	86.5	172.4	752.6	2 455.0	3 376.7	5 803.2	230.2	104.0	1 509.2
STANDARD METROPOLITAN STATISTICAL AREAS <sup>4</sup>													
COLORADO SPRINGS . . . . .	201	54	8.1	65.4	5.5	11.3	42.8	116.9	86.0	208.5	10.7	5.8	69.8
DENVER-Boulder . . . . .	1 771	577	88.2	205.1	58.6	117.2	520.1	1 769.8	2 124.0	3 889.9	147.2	74.1	1 121.5
PUEBLO . . . . .	87	26	9.0	96.7	7.1	14.8	77.4	160.4	199.9	362.3	27.4	9.4	117.0
COUNTIES													
ADAMS. . . . .	185	70	11.1	103.8	8.2	16.0	66.2	203.2	438.4	626.3	22.0	5.6	112.7
BOULDER. . . . .	206	61	11.6	122.8	7.1	14.2	59.2	209.6	296.3	507.7	27.1	8.5	214.4
DELTA. . . . .	24	6	4	2.3	3	6	1.8	4.4	12.9	18.1	2	5	4.9
DENVER. . . . .	984	341	42.2	386.0	27.6	53.4	226.1	823.4	906.4	1 727.5	43.4	40.5	538.5
FREMONT. . . . .	27	7	7	5.0	4	8	3.0	17.6	7.7	24.9	3.1	5	9.3
JEFFERSON. . . . .	206	47	17.4	209.3	11.9	26.1	139.0	443.1	436.0	870.7	55.9	13.4	191.6
LA PLATA. . . . .	20	4	3	2.1	2	5	1.4	3.9	3.0	6.9	1	3	1.9
LARIMER. . . . .	131	34	5.4	45.8	3.7	7.0	29.1	104.2	75.1	175.5	4.3	3.9	65.1
MESA. . . . .	68	15	1.6	10.5	1.1	2.2	6.7	20.2	23.6	43.1	2.4	1.7	18.8
MONTEZUMA. . . . .	31	4	3	1.4	2	3	1.0	3.7	3.6	7.3	7	3	2.3
MORGAN. . . . .	23	8	1.0	7.5	8	1.7	5.8	23.7	203.2	226.5	6	4	7.8
OTERO. . . . .	36	7	9	5.4	8	1.5	4.3	20.7	21.9	43.8	8	9	5.5
PUEBLO. . . . .	87	26	9.0	96.7	7.1	14.8	77.4	160.4	199.9	362.3	27.4	9.4	117.0
RIO GRANDE. . . . .	17	5	3	1.7	2	5	1.4	3.6	7.4	11.3	5	3	3.2
WELD. . . . .	97	26	5.1	45.5	3.7	7.6	30.9	115.4	359.2	466.1	27.0	3.2	44.2

<sup>1</sup> Some counties were withheld from publication in order to (a) avoid disclosing figures for individual companies or (b) permit further checking of the figures for smaller counties. Additional detail will appear in the final report for this State.

<sup>2</sup> Includes employment and payroll at central administrative offices and auxiliary units. (For a definition of these units, see appendix.)

<sup>3</sup> The total cost of materials and value of shipments may include extensive duplication arising from shipments between establishments in the same industry classification. (For a more complete explanation, see appendix.)

<sup>4</sup> The standard metropolitan statistical areas in this State are defined as follows:

COLORADO SPRINGS SMSA: Consists of El Paso and Teller Counties, CO.

DENVER-Boulder SMSA: Consists of Adams, Arapahoe, Boulder, Denver, Douglas, Gilpin, and Jefferson Counties, CO.

PUEBLO SMSA: Coextensive with Pueblo County, CO.

TABLE 3. General Statistics for the State, by Industry Groups and Industries: 1972 and 1967

(See appendix, Explanation of Terms)

Code	Industry	1972											1967	
		Establishments		All employees		Production workers			Value added by manufacture	Cost of materials <sup>1</sup>	Value of shipments <sup>1</sup>	Capital expenditures, new	All employees	Value added by manufacture
		Total	With 20 employees or more	Number	Payroll	Number	Man-hours	Wages						
		(number)	(number)	(1,000)	(million dollars)	(1,000)	(million)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(1,000)	(million dollars)
	ALL INDUSTRIES, TOTAL <sup>2</sup> . . . . .	2 807	816	125.6	1 021.9	86.5	172.4	752.6	2 455.0	3 376.7	5 803.2	230.2	104.0	1 509.2
20	FOOD AND KINDRED PRODUCTS. . . . .	359	159	21.4	196.5	14.8	30.8	123.6	513.7	1 724.3	2 230.9	57.6	18.7	310.7
201	MEAT PRODUCTS. . . . .	73	30	6.4	60.5	5.3	11.0	47.3	152.6	1 183.8	1 329.9	5.8	4.4	68.5
2011	MEATPACKING PLANTS . . . . .	54	21	5.4	53.9	4.4	9.4	42.1	139.3	1 149.6	1 281.6	(D)	3.8	61.5
202	DAIRY PRODUCTS . . . . .	42	20	1.4	13.0	.7	1.3	5.2	33.0	78.7	111.7	2.7	2.5	28.6
2026	FLUID MILK . . . . .	27	17	1.2	11.5	.5	1.0	4.5	27.8	68.9	96.7	2.6	2.3	23.8
203	PRESERVED FRUITS AND VEGETABLES. . . . .	20	10	1.0	4.8	.9	1.5	3.7	8.1	18.5	26.7	.6	1.0	10.4
2033	CANNED FRUITS AND VEGETABLES . . . . .	5	3	.4	2.0	.3	.5	1.4	2.9	7.9	10.9	.2	.4	5.1
204	GRAIN MILL PRODUCTS. . . . .	61	19	1.2	9.8	.9	2.0	6.7	22.4	79.7	101.9	4.1	1.1	27.8
205	BAKERY PRODUCTS. . . . .	45	21	3.0	25.3	2.2	4.3	17.6	64.7	45.6	110.1	1.5	3.0	46.3
206	SUGAR AND CONFECTIONERY PRODUCTS . . . . .	25	16	2.5	19.4	2.2	4.7	15.8	49.5	82.1	133.3	2.3	EE	(D)
208	BEVERAGES. . . . .	36	21	4.5	54.5	1.9	4.4	22.1	154.3	202.8	355.4	(D)	FF	(D)
209	MISC. FOODS AND KINDRED PRODUCTS . . . . .	48	18	1.1	7.3	.7	1.3	4.0	24.2	25.4	49.4	(D)	1.2	14.4
2099	FOOD PREPARATIONS, NEC . . . . .	31	12	.7	4.5	.5	.9	2.4	13.6	12.5	25.8	.3	.8	9.5
23	APPAREL, OTHER TEXTILE PRODUCTS. . . . .	84	31	2.7	13.9	2.2	3.8	11.0	38.5	42.0	74.7	1.3	1.6	11.6
232	MEN'S AND BOYS' FURNISHINGS. . . . .	10	7	.5	2.7	.5	.9	1.7	4.5	7.5	11.8	(D)	BB	(D)
239	MISC. FABRICATED TEXTILE PRODUCTS. . . . .	51	2	.7	3.6	.5	.9	2.2	15.5	20.6	35.8	.4	(NA)	(NA)
24	LUMBER AND WOOD PRODUCTS . . . . .	202	48	4.2	28.0	3.6	6.5	21.0	52.5	71.3	123.0	5.9	2.4	18.0
2411	LOGGING CAMPS, LOGGING CONTRACTORS . . . . .	41	2	.3	1.3	.3	.4	1.2	3.3	3.4	6.7	(D)	.2	1.9
242	SAWMILLS AND PLANING MILLS . . . . .	60	15	1.2	7.1	1.1	2.0	6.3	12.9	12.3	25.1	1.1	1.4	9.2
2421	SAWMILLS AND PLANING MILLS, GENERAL. . . . .	55	13	1.1	6.5	1.0	1.8	5.9	11.8	11.3	23.0	1.0	EE	(D)
243	MILLWORK, PLYWOOD, STRUC. MEMBERS. . . . .	56	17	1.4	9.7	1.1	1.9	6.1	17.3	23.1	40.2	1.7	.3	2.3
2431	MILLWORK . . . . .	28	7	.7	4.9	.5	.9	3.1	8.1	12.4	20.3	1.0	(NA)	(NA)
2434	WOOD KITCHEN CABINETS. . . . .	15	5	.4	2.6	.3	.5	1.4	4.8	3.7	8.4	.5	(NA)	(NA)
245	WOOD BUILDINGS AND MOBILE HOMES. . . . .	12	9	1.0	7.8	.8	1.7	5.9	15.2	27.6	42.4	2.3	(NA)	(NA)
25	FURNITURE AND FIXTURES . . . . .	79	26	1.9	14.1	1.5	2.6	9.7	27.7	21.1	48.1	.8	1.3	13.5
251	HOUSEHOLD FURNITURE. . . . .	45	18	1.1	6.8	.9	1.4	4.7	16.0	12.5	28.1	.4	.7	7.3
2512	UPHOLSTERED HOUSEHOLD FURNITURE. . . . .	11	6	.4	2.4	.3	.5	1.7	4.0	3.6	7.5	.1	.2	2.0
2515	MATTRESSES AND BEDSPRINGS. . . . .	9	8	.3	2.5	.3	.4	1.5	7.5	5.6	13.0	.2	.2	2.1
254	PARTITIONS AND FIXTURES. . . . .	18	7	.6	5.7	.4	.9	3.9	8.8	5.2	13.9	.3	.4	4.4

See footnotes at end of table.



TABLE 3. General Statistics for the State, by Industry Groups and Industries: 1972 and 1967—Continued

(See appendix, Explanation of Terms)

Code	Industry	1972										1967		
		Establishments		All employees		Production workers			Value added by manufacture	Cost of materials <sup>1</sup>	Value of shipments <sup>1</sup>	Capital expenditures, new	All employees	Value added by manufacture
		Total	With 20 employees or more	Number	Payroll	Number	Man-hours	Wages						
		(number)	(number)	(1,000)	(million dollars)	(1,000)	(million)	(million dollars)					(million dollars)	(million dollars)
26	PAPER AND ALLIED PRODUCTS. . . .	37	23	1.9	15.7	1.5	3.0	10.3	30.8	33.0	62.6	2.0	1.4	17.1
264	MISC. CONVERTED PAPER PRODUCTS . .	16	9	.8	6.6	.7	1.3	4.2	12.9	11.3	23.3	1.0	CC	(D)
27	PRINTING AND PUBLISHING. . . . .	483	78	10.4	90.8	6.3	12.0	52.0	182.4	67.4	249.3	11.2	8.3	97.9
2711	NEWSPAPERS . . . . .	108	23	4.8	44.2	2.4	4.8	23.5	81.5	26.8	108.4	5.7	4.4	44.9
2721	PERIODICALS. . . . .	28	6	.5	4.3	.2	.5	1.4	13.3	5.6	18.9	.4	.6	15.3
273	BOOKS. . . . .	18	7	.8	6.3	.7	1.3	4.6	13.0	4.0	16.7	.2	BB	(D)
275	COMMERCIAL PRINTING. . . . .	267	30	2.7	22.6	2.0	3.6	15.2	41.6	22.0	63.1	3.6	2.3	24.9
2761	MANIFOLD BUSINESS FORMS. . . . .	4	3	.3	2.0	.2	.3	1.1	3.1	2.2	5.1	.1	(NA)	(NA)
28	CHEMICALS AND ALLIED PRODUCTS. .	86	24	1.8	17.3	1.1	2.0	8.1	85.5	53.8	139.4	8.3	1.8	56.7
2851	PLANTS AND ALLIED PRODUCTS . . . . .	11	5	.3	3.0	.1	.3	1.0	7.8	8.7	17.0	.5	.3	5.0
289	MISCELLANEOUS CHEMICAL PRODUCTS. .	21	4	.3	2.6	.2	.3	1.0	7.5	6.0	13.4	.3	.2	4.9
29	PETROLEUM AND COAL PRODUCTS. . . .	18	7	.7	8.0	.6	1.2	6.1	24.0	81.6	104.9	6.4	.6	16.0
295	PAVING AND ROOFING MATERIALS . . .	12	4	.4	3.5	.3	.6	2.7	13.3	10.3	23.7	1.1	.3	3.7
30	RUBBER AND MISC. PLASTICS PROD. .	70	14	5.7	57.1	4.4	8.6	42.2	145.7	75.3	224.6	7.0	5.8	96.5
32	STONE, CLAY, AND GLASS PRODUCTS. .	208	58	6.3	56.2	4.7	9.1	39.4	136.8	98.9	235.1	37.3	1.8	69.6
325	STRUCTURAL CLAY PRODUCTS . . . . .	13	10	1.0	6.7	.8	1.4	4.9	13.2	6.4	19.5	(D)	.8	6.8
3251	BRICK AND STRUCTURAL CLAY TILE . . .	8	5	.8	5.2	.6	1.1	3.9	10.4	4.8	15.1	(D)	CC	(D)
327	CONCRETE, GYPSUM, PLASTER PRODUCTS	137	31	2.8	26.6	2.0	3.6	18.3	63.7	66.3	129.8	8.1	2.2	29.5
329	MISC. NONMETALLIC MINERAL PRODUCTS	28	7	.4	3.4	.3	.7	2.5	9.0	4.5	13.4	.6	AA	(D)
33	PRIMARY METAL INDUSTRIES . . . . .	61	22	8.6	93.1	7.0	14.1	75.3	153.0	159.8	320.0	25.1	8.2	109.5
332	IRON AND STEEL FOUNDRIES . . . . .	11	9	.9	7.9	.8	1.7	6.4	13.2	10.0	22.9	(D)	CC	(D)
34	FABRICATED METAL PRODUCTS. . . . .	236	80	8.7	73.6	6.6	13.5	49.6	157.4	173.8	327.9	20.4	5.1	67.1
341	METAL CANS AND SHIPPING CONTAINERS	5	4	1.8	15.8	1.4	3.1	11.5	38.6	72.5	112.0	10.4	(NA)	(NA)
342	CUTLERY, HANDTOOLS, AND HARDWARE .	14	7	1.1	7.7	.9	1.8	5.3	20.8	7.3	27.9	(-)	.5	7.9
344	FABRICATED STRUCTURAL METAL PROD. .	107	36	2.9	23.8	2.1	4.0	15.3	41.5	54.1	94.2	4.6	2.3	27.6
3441	FABRICATED STRUCTURAL METAL PRODUCTS	27	15	1.1	10.2	.8	1.6	6.6	18.0	23.0	40.3	1.3	.8	9.8
349	MISC. FABRICATED METAL PRODUCTS. .	44	18	1.9	17.6	1.4	2.9	11.5	37.7	30.1	66.1	1.4	1.2	15.7
3494	VALVES AND PIPE FITTINGS . . . . .	4	4	1.1	11.0	.8	1.7	6.8	24.2	17.2	40.6	.6	CC	(D)
3499	FABRICATED METAL PRODUCTS, NEC . . .	23	9	.5	4.0	.4	.7	2.9	8.5	8.2	16.0	.6	BB	(-)
35	MACHINERY, EXCEPT ELECTRICAL. . .	347	87	14.2	151.7	8.6	17.7	82.1	275.7	340.1	615.8	17.6	11.2	254.1
353	CONSTRUCTION AND RELATED MACHINERY	28	17	3.3	31.7	2.1	4.4	18.6	69.7	45.0	111.8	3.4	2.4	40.1
3532	MINING MACHINERY . . . . .	8	6	2.0	19.6	1.3	2.9	12.4	44.6	24.9	69.3	2.3	1.8	32.0
3535	CONVEYORS AND CONVEYING EQUIPMENT. .	7	3	.4	3.9	.2	.4	1.5	6.1	4.2	9.8	(D)	AA	(D)
354	METALWORKING MACHINERY . . . . .	44	12	.8	7.0	.6	1.1	5.0	15.1	8.6	22.5	1.2	.2	3.5
3544	SPECIAL DIES, TOOLS, JIGS, FIXTURES. .	26	3	.3	2.3	.2	.4	1.7	3.9	1.2	5.1	(D)	(D)	
355	SPECIAL INDUSTRY MACHINERY . . . . .	16	2	.3	2.4	.2	.3	1.3	4.2	5.0	8.8	.2	BB	(-)
356	GENERAL INDUSTRIAL MACHINERY . . .	29	6	1.0	8.1	.7	1.4	5.5	16.2	15.8	31.7	.5	.9	13.9
358	REFRIGERATION, SERVICE MACHINERY .	21	6	.4	3.5	.2	.4	1.7	7.6	8.7	16.3	.2	-	-
359	MISC. MACHINERY, EXCEPT ELECTRICAL	150	17	1.6	13.8	1.3	2.7	10.8	24.5	11.9	35.4	1.6	(NA)	(NA)
36	ELECTRIC, ELECTRONIC EQUIPMENT. .	108	31	6.5	53.8	4.7	9.0	30.7	81.5	112.6	190.9	12.3	-	-
367	ELECTRONIC COMPONENTS AND ACCESS. .	22	8	.7	3.9	.6	1.0	2.4	5.8	2.4	7.8	.2	-	-
369	MISC. ELECTRICAL EQUIP., SUPPLIES	19	8	.5	3.9	.3	.7	2.1	10.2	6.8	16.5	1.0	-	-
37	TRANSPORTATION EQUIPMENT . . . . .	85	31	11.6	147.0	9.0	19.0	108.0	260.9	182.7	443.7	5.8	9.0	134.5
371	MOTOR VEHICLES AND EQUIPMENT . . .	39	12	1.6	12.5	1.3	2.4	8.4	28.4	32.0	58.5	1.1	1.3	12.2
379	MISC. TRANSPORTATION EQUIPMENT . .	34	11	1.1	7.1	.9	1.7	4.5	11.6	17.1	28.2	.6	.4	3.1
38	INSTRUMENTS AND RELATED PRODUCTS	72	24	8.4	82.6	5.5	11.1	40.5	196.7	74.7	259.5	29.6	1.4	32.2
382	MEASURING AND CONTROLLING DEVICES. .	20	8	5.6	56.5	3.9	7.9	37.6	112.1	40.4	148.9	(D)	CC	(-)
384	MEDICAL INSTRUMENTS AND SUPPLIES .	17	7	1.1	9.3	.7	1.4	4.6	18.2	7.8	25.6	4.4	.6	6.4
3842	SURGICAL APPLIANCES AND SUPPLIES . .	8	3	.3	3.1	.2	.4	1.2	3.6	2.5	6.4	(D)	AA	(D)
39	MISC. MANUFACTURING INDUSTRIES . .	165	29	3.1	21.7	2.3	4.2	14.0	37.6	32.8	67.0	3.2	1.8	17.6
394	TOYS AND SPORTING GOODS. . . . .	36	8	1.7	10.6	1.3	2.4	6.0	16.0	16.8	29.7	2.5	.8	5.6
3944	GAMES, TOYS, AND CHILDREN'S VEHICLES	7	3	.6	4.0	.4	.6	1.8	5.9	5.9	10.6	.7	(NA)	(NA)
3949	SPORTING AND ATHLETIC GOODS, NEC . .	26	5	1.1	6.5	.9	1.7	4.2	9.9	10.7	18.7	1.8	CC	(D)
395	PENS, PENCILS, OFFICE, ART GOODS . .	12	3	.3	2.8	.1	.2	.9	4.4	5.1	9.5	(D)	.3	3.3
399	MISCELLANEOUS MANUFACTURES . . . .	90	13	.9	6.8	.7	1.2	4.0	14.1	8.8	22.5	.4	.4	2.0
3993	SIGNS AND ADVERTISING DISPLAYS . . .	49	7	.5	4.2	.3	.6	2.6	7.6	3.3	10.8	.3	.4	5.1
--	ADMINISTRATIVE AND AUXILIARY . . .	74	26	4.5	56.1	-	-	-	-	-	-	-	-	-

Note: The following symbols indicate employment size range for 1967:

AA less than 250 employees

EE 1,000 to 2,499 employees

BB 250 to 199 employees

FF 2,500 employees and over

CC 500 to 999 employees

- Represents zero. (NA) Not available. (D) Withheld to avoid disclosing figures for individual companies.

<sup>1</sup>The total cost of materials and value of shipments for industry groups shown may include extensive duplication arising from shipments between establishments in the same industry classification. (For a more complete explanation, see appendix.)<sup>2</sup>Includes figures for industry groups which have been withheld from publication in order to avoid disclosing figures for individual companies or to permit further checking of figures for smaller industry groups. Additional detail will appear in the final report for this State.

## Appendix A. SCOPE AND COVERAGE

This report is one of a series presenting preliminary information, by State, from the 1972 Census of Manufactures. The data will be superseded in a final report which, in turn, will be included in *Volume III, Area Statistics, 1972 Census of Manufactures*. The final report will include a comprehensive discussion of the concepts and definitions used in the census.

The census of manufactures covers each manufacturing establishment in the United States with one paid employee or more; manufacturing establishments with no employees are excluded. Firms which operated more than one establishment were required to file a separate report for each location. Companies which engaged in distinctly different lines of activity at one location were asked to submit separate reports if the company records permitted such a separation and the activities were of significant size.

This report includes figures for administrative offices, warehouses, garages, or other auxiliary units which service manufacturing establishments.

In the 1972 census, the approximately 120,000 manufacturing establishments with fewer than 10 employees were excused from filing reports. Under special arrangements which safeguarded the confidentiality of both tax and census records, data on payrolls, sales, and industry classification from the administrative records of the Social Security Administration and the Internal Revenue Service were made available to the Census Bureau for use in the 1972 Economic Censuses (retail and wholesale trade, service industries, construction industries, manufactures, and mineral industries). Estimates for data other than payrolls and sales for these small establishments were constructed from industry averages. The effect on industry aggregates is slight in most industries. For manufacturing as a whole, these small establishments account for less than 3 percent of the payrolls and value added.

Establishments are classified by industry in accordance with industry definitions described in the 1972 edition of the Standard Industrial Classification (SIC) Manual. For 1972, the SIC was significantly revised and the comparability with prior year's data for some industries was significantly affected. The comparability at the 2- and 3-digit SIC levels was less affected. The final volumes of the 1972 Census of Manufactures will contain a table relating aggregates based on the 1972 SIC with aggregates derived from classifying establishments according to the 1967 SIC definitions.

As in earlier censuses, a number of small establishments may have been misclassified as to industry. However, such possible misclassifications have significant effect on *none* of the statistics except the number of establishments. As indicated above, report forms were not mailed to very small establishments (fewer than 10 employees). The industry classifications for these establishments were assigned on the basis of brief descriptions of the general activity of the establishment. Where the description is incomplete or there are relatively fine lines of demarcation among industries or between manufacturing and nonmanufacturing activity, the code assigned to an establishment could differ from that which would have been assigned on the basis of more complete product information. Therefore, the total establishment count for individual industries should be viewed as an approximation rather than a precise measurement. The counts for establishments with 20 employees or more are more reliable than the total number of establishments.

More detailed figures for this State will appear in the final census reports. Final reports will also include a comprehensive discussion of such concepts as "industry" and "establishment," as well as the various statistical items such as "employment," "value of shipments," and "value added." Similar preliminary and final reports will be issued for other States during the coming months. A series of preliminary summary reports showing U.S. totals for each manufacturing industry and for each State are being issued. Final industry reports and final area reports will be published during 1974.

Order forms describing the individual reports and listing their prices may be obtained from any U.S. Department of Commerce district office or from the Publications Distribution Section, Social and Economic Statistics Administration, Washington, D.C. 20233.

The 1972 Census of Manufactures is the 29th census of manufacturing establishments in the United States. For 1972, it was conducted jointly with the censuses of mineral industries, construction industries, retail trade, wholesale trade, and selected services under authority of Title 13 of the United States Code. Title 13 specifies that a census of manufactures be conducted every 5 years and, as amended, to cover years ending in "2" and "7". Title 13 also authorizes an annual sample survey of manufacturing establishments in interim years.



## Appendix B. EXPLANATION OF TERMS

*(For a more complete discussion of these terms and the method of compiling the Census of Manufactures, see the "Introduction" to the 1967 Census of Manufactures, Volume III).*

**All Employees**—All full-time and part-time employees on the payrolls of operating manufacturing establishments for any part of the pay period ending nearest the 12th of the months specified on the report form. Included are all persons on paid sick leave, paid holidays, and paid vacations during these pay periods. Officers of corporations are included as employees; proprietors and partners of unincorporated firms are excluded. The "all employee" number is the average number of production workers for the midmonth payroll period of March, May, August, and November plus the number of nonproduction employees in mid-March.

**Number of Production Workers**—Workers (up through the working foreman level) engaged in fabricating, processing, assembling, inspecting, receiving, packing, warehousing, shipping (but not delivering), and maintenance, repair, janitorial, and watchman services, product development, auxiliary production for plant's own use (e.g., powerplant), recordkeeping, and other closely associated services. Proprietors and partners are excluded.

**Payroll**—This item includes all forms of compensation such as salaries, wages, commissions, dismissal pay, bonuses, vacation and sick leave pay, and compensation in kind, prior to such deductions as employees' Social Security contributions, withholding taxes, group insurance, union dues, and savings bonds. The total includes salaries of officers of these establishments, if a corporation; it excludes payments to the proprietor or partners, if an unincorporated concern. Respondents were told that in reporting they could follow the definition of payrolls used for calculating the Federal withholding tax.

**Man-Hours of Production Workers**—This total relates to production-worker man-hours worked or paid for at the plant including actual overtime hours (not straight-time equivalent hours). It excludes hours paid for vacation, holidays, or sick leave when the employee was not at the plant.

**Cost of Materials**—The term "Cost of Materials" refers to charges actually paid or payable for items consumed or put into production during the year, including freight and other direct charges incurred by the establishment in acquiring these materials. It includes the cost of materials or fuel consumed regardless of

whether these items were purchased by the establishment from other companies, transferred to it from other establishments of the same company, or withdrawn from inventory during the year. The establishment was requested to value materials transferred from other parts of the company at its approximate market value, not at cost of production. The important components of this cost item are (a) all raw materials, semifinished goods, parts, components, containers, scrap, and supplies put into production or used as operating supplies and for repair and maintenance during the year; (b) electric energy purchased; (c) fuels consumed for heat, power, or the generation of electricity; (d) work done by others on materials or parts furnished by manufacturing establishments (contract work); and (e) products bought and resold in the same condition.

**Value of Shipments**—The value of shipments is the received or receivable net selling value, f.o.b. plant (exclusive of freight and taxes), of all products shipped, both primary and secondary, as well as all miscellaneous receipts such as receipts for contract work performed for others, installation and repair, sales of scrap, and sale of products bought and resold without further processing. Included are all items made by the establishment or for it under contract from materials owned by it whether sold, transferred to other plants of the same company, or shipped on consignment. The net selling value of products made in one plant on a contract basis from materials owned by another was reported by the plant providing the materials.

In the case of multiunit companies, the manufacturer was requested to report the value of products transferred to other establishments of the same company at full economic value; i.e., to include not only the direct costs of production but also a reasonable proportion of "all other costs" (including company overhead) and profit.

**Duplication in Cost of Materials and Value of Products**—The aggregate cost of materials and value-of-shipments figures for industry groups and for all manufacturing industries may include large amounts of duplication since the products of some industries are used as materials by others. With some important exceptions, such as motor vehicles and parts, this duplication is not significant within individual industries but arises from the addition of the totals of related industries in successive stages of the production of a finished manufactured product. Examples are the addition of flour mills to bakeries in the food group and the addition of pulp mills to paper mills in the paper and allied products group of industries. Esti-



mates of this duplication indicate that the value of manufactured products exclusive of such duplication—the value of finished manufactures—approximates two-thirds of the total value of products.

Prior to 1962, the Bureau of the Census did not publish figures for cost of materials or value of shipments if they contained significant duplication. Effective with the 1962 annual survey these figures were shown at all industry levels for the United States to meet the requests for their use in studies in which the presence of an indeterminate amount of duplication is not a limiting factor. However, they are appropriately footnoted. Effective with the 1964 annual survey, these industry group totals are also shown at the State, standard metropolitan statistical area, and large-county level.

Even where there is no significant amount of duplication, value-of-shipments figures are deficient as measures of the relative economic importance of individual manufacturing industries or geographic areas because of the wide variation in ratio of materials, labor, and other processing costs to value of shipments among industries.

**Value Added by Manufacture**—This measure of manufacturing activity is derived by subtracting the cost of materials, supplies, containers, fuel, purchased electricity, and cost of resales contract work from the value of shipments for products manufactured plus resales and receipts for services rendered. The result of this calculation is adjusted by the net change in finished goods and work-in-process inventories between the beginning and end of the year. (In the few industries that report value of production rather than value of shipments, only changes in work-in-process inventories are used to adjust value added. In the shipbuilding and repairing industry, no inventory adjustment is made.)

“Value added” avoids the duplication in the value of shipments figure which results from the use of products of some establishments as materials by others. Value added is considered to be the best value measure available for comparing the relative economic importance of manufacturing among industries and geographic areas.

**Expenditures for Plant and Equipment**—Manufacturing establishments in operation and establishments under construction but not yet in operation, were asked to report their expenditures for (a) permanent additions and major alterations to the manufacturing establishment, and (b) new machinery and equipment used for replacement purposes and additions to plant capacity if they are of the type for which depreciation accounts are ordinarily maintained.

These totals exclude expenditures for new facilities and equipment leased from nonmanufacturing concerns; new facilities owned by the Federal Government but operated under contract by private companies; and plant and equipment furnished to the manufacturer by communities and nonprofit organizations. Expenditures for used plant and equipment (although reported in the census), expenditures for land, and cost of maintenance and repairs charged as current operating expense are also omitted from the figures for new capital expenditures.

**Central Administrative Offices and Auxiliary Units**—In the 1972 census as in previous years, respondents were asked to file separate reports for central administrative offices or auxiliary units which were (1) at different locations from the establishments served or, (2) at the same location as one of these establishments but were not operated as an integral part thereof and served two or more establishments. The functions of employees in central administrative offices include general company policy determination, planning and management (that is, company purchasing, accounting, general engineering, direction of company personnel matters, and legal and patent matters). Auxiliaries are storage facilities, garages, repair shops, purchasing offices, sales promotion offices, and research laboratories serving the plants or central management of the company.

**Standard Metropolitan Statistical Areas**—Standard metropolitan statistical areas (SMSA) are integrated economic and social units with a large volume of daily travel and communication between the central city and outlying parts of the area.<sup>1</sup> Each area (except in New England) consists of one whole county or more. An area may contain not only highly industrialized counties but also adjoining counties which, though primarily residential in character, contribute significantly to the industrial counties' labor force and are socially and economically integrated with the central city. These areas are defined by the Federal Committee on Standard Metropolitan Statistical Areas of the Office of Management and Budget for general-purpose use throughout the Federal Government in presenting economic and social data. In the New England States, similar intergration criteria are applied in defining

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<sup>1</sup> Each standard metropolitan statistical area must include either (1) a city with 50,000 or more inhabitants, or (2) a city having a population of at least 25,000 which (a) with the addition of the population of contiguous places has a population density of at least 1,000 persons per square mile; (b) constitutes, for general economic and social purposes, a single community with a combined population of at least 50,000; and (c) includes a total population of at least 75,000 in the county or counties in which the city and contiguous places are located.



SMSA's on a city and town basis because towns rather than counties are regarded as the significant unit in this region of the country.

The requirement that each SMSA consist of county units (except in New England) sometimes results in the inclusion in an area of considerable amount of territory which would not ordinarily be considered "metropolitan," much less "industrial." It is recognized that metropolitan areas could be more accurately defined in terms of smaller area segments such as minor civil

divisions, but the usefulness of areas so defined would be limited by the fact that many types of economic and social data are available only on a county basis.

Each SMSA is designated by the name of the principal city of the area. In addition to the name of the principal city, the area title may include one or two additional city names.

The data for SMSA's which changed definition since the 1967 census have not been retabulated on the new basis for years prior to 1972.

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# 1972 CENSUS OF MANUFACTURES

## AREA SERIES

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U. S. DEPARTMENT OF COMMERCE • Social and Economic Statistics Administration • BUREAU OF THE CENSUS

ued April 1974

## Connecticut

Value added by manufacturing in 1972 in the State of Connecticut amounted to \$6,956 million, a 15-percent increase from 1971 and a 9-percent increase from 1967.

This report presents preliminary results from the 1972 Census of Manufactures for the State, its Standard Metropolitan Statistical Areas, and its counties.

Data are provided for industry groups within the State. Historical data, back to 1958, are included for the State as a whole,

and 1967 figures on employment and value added are provided for the smaller areas.

The figures in this report have been subjected to only preliminary review and must be regarded as approximations of the final census figures. No adjustments have been made in the value figures for changes in price level.

For an explanation of the terms used in the tables, see the appendix at the end of this report.

TABLE 1. General Statistics for the State: 1972 and Earlier Years

(See appendix, Explanation of Terms)

Year	Establishments		All employees <sup>1</sup>		Production workers			Value added by manufacture	Cost of materials <sup>2</sup>	Value of shipments <sup>2</sup>	Capital expenditures, new
	Total	With 20 employees or more	Number	Payroll	Number	Man-hours	Wages				
	(number)	(number)	(1,000)	(million dollars)	(1,000)	(millions)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(million dollars)
CONNECTICUT											
1972 Census .....	5,879	2,263	406.1	3,948.7	258.8	524.0	2,084.0	6,956.0	5,506.9	12,372.8	344.0
1971 ASM .....	(NA)	(NA)	407.0	3,613.0	261.0	520.7	1,948.5	6,049.3	5,233.2	11,358.0	324.7
1970 ASM .....	(NA)	(NA)	452.6	3,788.6	298.3	599.5	2,109.2	6,595.7	5,491.8	12,099.1	343.2
1969 ASM .....	(NA)	(NA)	475.1	3,843.7	318.5	655.9	2,198.2	7,172.2	5,829.0	12,792.3	379.4
1968 ASM .....	(NA)	(NA)	469.9	3,587.1	318.4	657.2	2,077.8	6,567.1	5,580.4	12,107.5	401.3
1967 Census .....	5,829	2,309	477.7	3,494.3	329.9	684.6	2,066.0	6,389.8	5,284.1	11,619.7	445.7
1966 ASM .....	(NA)	(NA)	468.9	3,340.7	327.8	694.2	2,012.2	6,185.0	4,970.6	10,845.2	403.6
1965 ASM .....	(NA)	(NA)	440.4	2,951.0	306.4	639.8	1,768.6	5,308.6	4,300.3	9,481.2	269.9
1964 ASM .....	(NA)	(NA)	420.8	2,715.9	291.0	604.7	1,622.1	4,754.4	3,834.2	8,521.0	222.2
1963 Census .....	5,607	2,050	419.4	2,583.8	294.0	601.7	1,569.1	4,495.9	(NA)	(NA)	214.8
1962 ASM .....	(NA)	(NA)	418.4	2,462.7	298.4	606.7	1,528.2	4,210.0	(NA)	(NA)	224.0
1961 ASM .....	(NA)	(NA)	405.6	2,282.4	289.8	584.5	1,419.2	3,885.8	(NA)	(NA)	171.2
1960 ASM .....	(NA)	(NA)	409.3	2,237.2	296.2	595.3	1,413.0	3,784.6	(NA)	(NA)	198.0
1959 ASM .....	(NA)	(NA)	408.5	2,184.8	298.7	608.7	1,409.3	3,803.4	(NA)	(NA)	169.3
1958 Census .....	5,326	1,874	394.2	1,967.1	284.6	563.8	1,254.4	3,200.3	(NA)	(NA)	195.4

Note: "ASM" data are based on a representative sample of manufacturing establishments canvassed in the Annual Survey of Manufactures. These estimates may differ from the results of a complete canvass of all manufacturing establishments. The standard errors associated with these estimates are published in the annual survey of manufactures volumes for this period. For comparative purposes, the 1972 ASM estimate for the State of Connecticut was 387 thousand employees, and \$6,526 million in value added with corresponding standard error of estimate of 1 and 1.

(NA) Not available.

<sup>1</sup>Includes employment and payroll at central administrative offices and auxiliary units. (For a definition of these units, see appendix.)

<sup>2</sup>The total cost of materials and value of shipments may include extensive duplication arising from shipments between establishments in the same industry classification. (For a more complete explanation, see appendix.)

TABLE 2. General Statistics for the State, Standard Metropolitan Statistical Areas, and Counties: 1972 and 1967

(See appendix, Explanation of Terms)

State, standard metropolitan statistical areas, and counties <sup>1</sup>	1972											1967	
	Establishments		All employees <sup>2</sup>		Production workers			Value added by manufacture	Cost of materials <sup>3</sup>	Value of shipments <sup>3</sup>	Capital expenditures, new	All employees	Value added by manufacture
	Total (number)	With 20 employees or more (number)	Number (1,000)	Payroll (million dollars)	Number (1,000)	Man-hours (million)	Wages (million dollars)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(1,000)	(million dollars)
CONNECTICUT, TOTAL . . . . .	5 879	2 263	406.1	3 948.7	258.8	524.0	2 084.0	6 956.0	5 506.9	12 372.8	344.0	477.7	6 389.8
STANDARD METROPOLITAN STATISTICAL AREAS <sup>4</sup>													
BRIDGEPORT . . . . .	917	346	63.6	605.1	41.7	83.6	335.7	1 175.6	844.4	2 038.4	45.9	79.5	1 150.0
BRISTOL . . . . .	138	55	9.2	92.3	7.3	14.7	65.2	183.7	106.2	285.3	7.9	(NA)	(NA)
DANBURY . . . . .	270	105	14.5	137.1	9.5	19.9	75.3	345.0	236.8	553.0	27.6	(NA)	(NA)
HARTFORD . . . . .	1 188	427	88.0	899.4	51.6	105.8	439.0	1 445.2	1 226.1	2 625.5	61.6	110.6	1 432.3
MERIDEN . . . . .	113	48	6.5	55.8	4.3	9.0	34.9	95.0	84.8	182.2	8.4	8.4	110.2
NEW BRITAIN . . . . .	393	144	27.1	248.9	20.5	41.5	169.9	475.9	347.4	807.6	16.6	33.5	461.2
NEW HAVEN-WEST HAVEN . . . . .	806	312	51.7	490.2	33.3	67.7	268.1	923.7	826.5	1 733.0	39.6	46.1	605.5
NEW LONDON-NORWICH . . . . .	250	108	29.2	276.4	18.7	37.5	144.5	651.8	535.2	1 178.9	48.2	29.9	352.1
PORTION IN RHODE ISLAND . . . . .	34	19	2.3	16.2	1.9	3.4	10.5	26.1	20.2	45.5	1.5	(NA)	(NA)
PORTION IN CONNECTICUT . . . . .	216	89	26.9	260.2	16.8	34.1	134.0	625.7	515.0	1 133.4	46.7	(NA)	(NA)
NORWALK . . . . .	269	103	15.7	163.2	8.8	17.8	66.2	322.2	179.3	502.3	13.2	20.8	272.6
SPRINGFIELD-CHICOPEE-HOLYOKE . . . . .	997	394	62.1	525.9	44.8	90.0	340.2	1 141.6	944.5	2 072.5	54.8	73.3	947.7
STAMFORD . . . . .	411	148	28.9	341.1	11.7	22.8	99.7	529.5	326.5	864.9	17.1	24.6	466.6
WATERBURY . . . . .	509	206	36.8	334.6	25.5	51.5	194.7	635.6	683.7	1 317.5	54.9	42.6	503.8
COUNTIES													
FAIRFIELD . . . . .	1 739	663	113.1	1 161.1	64.6	129.1	518.8	2 085.1	1 428.6	3 518.4	82.5	129.8	1 885.9
HARTFORD . . . . .	1 529	567	114.4	1 158.2	72.4	147.9	626.2	1 914.3	1 553.5	3 404.2	72.8	150.8	1 968.9
LITCHFIELD . . . . .	342	116	17.0	142.4	12.8	25.9	92.9	298.6	236.6	532.6	(D)	20.0	225.2
MIDDLESEX . . . . .	260	92	15.0	142.7	10.9	22.0	83.7	262.7	213.8	474.0	11.7	13.5	225.5
NEW HAVEN . . . . .	1 527	618	101.0	940.5	67.4	137.0	535.9	1 666.1	1 526.9	3 179.7	102.9	114.8	1 527.6
NEW LONDON . . . . .	220	90	26.5	256.5	16.3	33.3	130.9	427.3	316.4	735.8	34.7	30.4	358.6
TOLLAND . . . . .	121	39	6.2	50.9	4.2	8.4	28.1	91.3	49.5	138.8	(D)	4.0	44.8
WINDHAM . . . . .	140	78	12.9	96.7	10.2	20.4	67.5	210.6	182.0	389.3	8.3	14.5	153.4

(NA) Not available. (D) Withheld to avoid disclosing figures for individual companies.

<sup>1</sup>Some counties were withheld from publication in order to (a) avoid disclosing figures for individual companies or (b) permit further checking of the figures for smaller counties. Additional detail will appear in the final report for this State.<sup>2</sup>Includes employment and payroll at central administrative offices and auxiliary units. (For a definition of these units, see appendix.)<sup>3</sup>The total cost of materials and value of shipments may include extensive duplication arising from shipments between establishments in the same industry classification. (For a more complete explanation, see appendix.)<sup>4</sup>The standard metropolitan statistical areas in this State are defined as follows:

BRIDGEPORT SMSA: Consists of Bridgeport and Shelton cities and Easton, Fairfield, Monroe, Stratford, and Trumbull towns in Fairfield County, and Derby and Milford cities in New Haven County, CT.

BRISTOL SMSA: Consists of Bristol city and Burlington town in Hartford County and Plymouth town in Litchfield County, CT.

DANBURY SMSA: Consists of Danbury city and Methen, Brookfield, New Fairfield, Newtown, and Redding towns in Fairfield County, and New Milford town in Litchfield County, CT.

HARTFORD SMSA: Consists of Hartford city and Avon, Bloomfield, Canton, East Granby, East Hartford, East Windsor, Enfield, Farmington, Glastonbury, Granby, Manchester, Marlborough, Newington, Rocky Hill, Simsbury, South Windsor, Suffield, West Hartford, Wethersfield, Windsor, and Windsor Locks towns in Hartford County; New Hartford town in Litchfield County; Cromwell, East Hampton, and Portland towns in Middlesex County; Colchester town in New London County; and Andover, Bolton, Columbia, Coventry, Ellington, Hebron, Stafford, Tolland, Vernon, and Willington towns in Tolland County, CT.

MERIDEN SMSA: Coextensive with Meriden city in New Haven County, CT.

NEW BRITAIN SMSA: Consists of New Britain city and Berlin, Plainville, and Southington towns in Hartford County, CT.

NEW HAVEN-WEST HAVEN SMSA: Consists of Clinton and Killingworth towns in Middlesex County, and New Haven and West Haven cities, and Bethany, Branford, East Haven, Guilford, Hamden, Madison, North Branford, North Haven, Orange, Wallingford, and Woodbridge towns in New Haven County, CT.

NEW LONDON-NORWICH, CT-RI, SMSA: Consists of Old Saybrook town in Middlesex County; New London and Norwich cities and Bozrah, East Lyme, Griswold, Groton, Ledyard, Lisbon, Montville, Old Lyme, Preston, Sprague, Stonington, and Waterford towns in New London County, CT; and Hopkinton and Westerly towns in Washington County, RI.

NORWALK SMSA: Consists of Norwalk city and Weston, Westport, and Wilton towns in Fairfield County, CT.

SPRINGFIELD-CHICOPEE-HOLYOKE, MA-CT, SMSA: Consists of Chicopee, Holyoke, Springfield, and Westfield cities, and Agawam, East Longmeadow, Hampden, Longmeadow, Ludlow, Monson, Palmer, Southwick, West Springfield, and Wilbraham towns in Hampden County, MA; Northampton city and Belchertown, Easthampton, Granby, Hadley, Hatfield, South Hadley, and Southampton towns in Hampshire County, MA; Warren town in Worcester County, MA; and Somers town in Tolland County, CT.

STAMFORD SMSA: Consists of Stamford city and Darien, Greenwich, and New Canaan towns in Fairfield County, CT.

WATERBURY SMSA: Consists of Thomaston, Watertown, and Woodbury towns in Litchfield County and Waterbury city, Naugatuck borough, and Beacon Falls, Cheshire, Middlebury, Prospect, Southbury, and Wolcott towns in New Haven County, CT.



TABLE 3. General Statistics for the State, by Industry Groups and Industries: 1972 and 1967

(See appendix, Explanation of Terms)

Code	Industry	1972											1967	
		Establishments		All employees		Production workers			Value added by manufacture	Cost of materials <sup>1</sup>	Value of shipments <sup>1</sup>	Capital expenditures, new	All employees	Value added by manufacture
		Total (number)	With 20 employees or more (number)	Number (1,000)	Payroll (million dollars)	Number (1,000)	Man-hours (million)	Wages (million dollars)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(1,000)	(million dollars)
	ALL INDUSTRIES, TOTAL <sup>2</sup> . . . . .	5 879	2 263	406.1	3 948.7	258.8	524.0	2 084.0	6 956.0	5 506.9	12 372.8	344.0	477.7	6 389.8
20	FOOD AND KINDRED PRODUCTS. . . . .	284	102	11.5	98.7	6.6	13.1	49.8	263.2	327.4	590.0	11.2	12.8	196.9
201	MEAT PRODUCTS. . . . .	37	11	.6	4.4	.4	.9	2.8	7.9	29.3	37.3	.2	.8	9.4
2013	SAUSAGES AND OTHER PREPARED MEATS. . . . .	26	9	.4	3.0	.3	.6	1.8	6.1	17.4	23.4	.2	CC	(D)
202	DAIRY PRODUCTS. . . . .	63	26	2.8	22.5	1.2	2.1	8.1	52.2	112.5	163.9	2.1	3.4	50.7
2024	ICE CREAM AND FROZEN DESSERTS. . . . .	14	5	.5	4.6	.3	.6	2.4	10.8	18.2	28.7	.6	.3	5.5
203	PRESERVED FRUITS AND VEGETABLES. . . . .	18	4	.4	2.9	.3	.7	1.8	15.6	9.2	24.7	.5	(NA)	(NA)
205	BAKERY PRODUCTS. . . . .	76	28	3.9	37.6	2.5	5.2	22.5	67.1	62.2	129.2	4.1	5.0	55.9
206	BEVERAGES. . . . .	49	22	2.3	19.0	1.0	2.0	7.3	83.5	73.3	156.9	3.2	1.9	46.9
209	MISC. FOODS AND KINDRED PRODUCTS. . . . .	23	5	.6	5.0	.5	1.0	3.3	15.0	12.2	27.5	.4	(NA)	(NA)
21	TOBACCO PRODUCTS. . . . .	7	6	.3	1.8	.2	.4	1.3	3.6	10.9	14.1	(2)	BB	(D)
22	TEXTILE MILL PRODUCTS. . . . .	126	83	13.1	92.6	11.1	23.2	69.0	198.0	166.0	360.5	13.2	13.5	131.0
2221	WEAVING MILLS, SYNTHETICS. . . . .	6	6	1.5	10.7	1.3	2.6	8.0	18.5	14.7	32.6	.4	1.4	12.0
2231	WEAVING AND FINISHING MILLS, WOOL. . . . .	8	7	.6	3.8	.5	.9	3.0	6.4	4.0	10.0	.2	1.1	10.6
225	KNITTING MILLS. . . . .	21	16	1.5	9.6	1.4	2.8	7.3	16.0	16.4	32.4	.6	EE	(D)
226	TEXTILE FINISHING, EXCEPT WOOL. . . . .	23	18	3.5	25.9	3.0	6.4	20.1	56.0	34.0	90.3	4.3	EE	(D)
229	MISCELLANEOUS TEXTILE GOODS. . . . .	37	19	3.2	25.9	2.5	5.6	18.0	59.2	68.3	125.7	4.5	2.6	28.6
2295	COATED FABRICS, NOT RUBBERIZED. . . . .	10	7	1.9	17.2	1.5	3.4	11.9	35.5	49.2	83.3	1.5	1.2	16.1
23	APPAREL, OTHER TEXTILE PRODUCTS. . . . .	265	167	13.2	72.3	11.0	19.4	49.7	136.7	113.4	248.4	2.0	13.9	95.7
232	MEN'S AND BOYS' FURNISHINGS. . . . .	25	20	1.8	9.7	1.5	2.7	6.4	22.0	18.9	40.6	.5	1.8	14.6
233	WOMEN'S AND MISSES' OUTERWEAR. . . . .	111	87	6.4	34.5	5.3	8.9	24.0	58.8	45.7	105.7	.6	6.2	37.0
2335	WOMEN'S AND MISSES' DRESSES. . . . .	68	51	3.1	14.6	2.9	4.6	12.2	17.9	5.0	23.3	.1	3.4	17.7
2339	WOMEN'S, MISSES' OUTERWEAR, NEC. . . . .	13	11	.8	4.9	.6	1.2	3.2	9.1	7.4	17.5	.2	.6	4.2
234	WOMEN'S, CHILDREN'S UNDERGARMENTS. . . . .	25	21	1.7	8.6	1.4	2.5	6.2	14.3	9.3	23.5	.3	1.7	10.8
2341	WOMEN'S AND CHILDREN'S UNDERWEAR. . . . .	12	11	.9	4.3	.8	1.4	3.4	6.6	4.7	11.2	(D)	.7	2.9
2342	BRASSIERES AND ALLIED GARMENTS. . . . .	14	11	.8	4.3	.6	1.1	2.9	7.7	4.6	12.3	(D)	1.0	7.9
238	MISC. APPAREL AND ACCESSORIES. . . . .	18	10	1.0	6.9	.9	1.8	4.1	13.9	13.9	26.5	.3	1.1	8.7
2387	APPAREL BELTS. . . . .	6	4	.7	5.2	.6	1.2	2.7	10.7	11.7	21.4	.2	.4	2.9
239	MISC. FABRICATED TEXTILE PRODUCTS. . . . .	71	20	1.6	8.6	1.2	2.3	5.5	18.3	19.1	36.2	.3	1.9	14.4
2391	CURTAINS AND DRAPERIES. . . . .	11	3	.3	1.6	.2	.4	1.0	4.0	5.1	9.0	.1	CC	(D)
2392	HOUSEFURNISHINGS, NEC. . . . .	16	7	.5	2.6	.5	.9	1.9	5.2	9.0	13.5	.1	BB	(D)
2399	FABRICATED TEXTILE PRODUCTS, NEC. . . . .	13	4	.3	2.4	.2	.3	1.2	6.0	3.2	8.6	.1	.4	3.5
24	LUMBER AND WOOD PRODUCTS. . . . .	152	30	1.9	13.9	1.6	3.1	10.2	21.7	24.1	45.7	2.8	(NA)	(NA)
243	MILLWORK, PLYWOOD, STRUC. MEMBERS. . . . .	75	11	.7	5.8	.6	1.2	4.2	10.1	10.3	20.5	.3	(NA)	(NA)
2431	MILLWORK. . . . .	34	3	.3	2.4	.2	.5	1.6	4.0	4.6	8.6	.1	(NA)	(NA)
2434	WOOD KITCHEN CABINETS. . . . .	31	4	.3	2.7	.3	.6	2.2	4.6	3.7	8.3	.1	(NA)	(NA)
244	WOOD CONTAINERS. . . . .	9	5	.3	1.8	.2	.5	1.4	2.5	2.4	4.9	.1	(NA)	(NA)
245	WOOD BUILDINGS AND MOBILE HOMES. . . . .	6	5	.3	2.1	.2	.3	1.3	2.4	3.4	5.9	(D)	(NA)	(NA)
249	MISCELLANEOUS WOOD PRODUCTS. . . . .	29	5	.4	2.4	.3	.6	1.8	4.4	5.7	10.0	.1	(NA)	(NA)
2499	WOOD PRODUCTS, NEC. . . . .	29	5	.4	2.4	.3	.6	1.8	4.4	5.7	10.0	.1	(NA)	(NA)
25	FURNITURE AND FIXTURES. . . . .	97	43	5.0	37.5	4.0	7.7	25.9	78.1	73.2	150.1	5.8	5.0	51.7
251	HOUSEHOLD FURNITURE. . . . .	56	24	2.8	19.0	2.4	4.5	14.3	42.1	47.0	88.2	2.4	(NA)	(NA)
2511	WOOD HOUSEHOLD FURNITURE. . . . .	21	5	.6	4.5	.5	1.1	3.2	8.0	6.3	14.2	.3	(NA)	(NA)
2512	UPHOLSTERED HOUSEHOLD FURNITURE. . . . .	15	5	.5	2.7	.4	.7	2.1	4.4	4.1	8.6	(D)	(NA)	(NA)
2515	MATTRESSES AND BEDSPRINGS. . . . .	12	6	.8	5.8	.6	1.3	4.2	17.8	16.6	34.1	1.2	.7	7.4
254	PARTITIONS AND FIXTURES. . . . .	14	7	.5	4.9	.4	.7	2.9	8.7	6.5	15.0	(D)	.3	3.8
259	MISC. FURNITURE AND FIXTURES. . . . .	16	8	1.0	8.2	.8	1.5	5.4	16.6	12.5	29.7	1.9	1.1	9.8
26	PAPER AND ALLIED PRODUCTS. . . . .	99	66	6.9	65.4	5.4	11.2	45.4	153.5	158.5	310.0	17.3	FF	(D)
2621	PAPERMILLS, EXCEPT BUILDING PAPER. . . . .	7	4	.8	9.9	.6	1.3	6.6	28.0	31.9	59.7	3.4	.9	19.5
264	MISC. CONVERTED PAPER PRODUCTS. . . . .	31	14	1.6	14.3	1.3	2.7	10.7	51.6	45.9	96.0	8.9	EE	(D)
265	PAPERBOARD CONTAINERS AND BOXES. . . . .	52	40	3.6	31.3	2.7	5.5	20.2	53.9	55.1	108.3	1.5	4.0	48.0
2651	FOLDING PAPERBOARD BOXES. . . . .	17	13	1.7	15.3	1.3	2.6	10.4	26.9	23.4	49.6	(D)	2.1	28.0
2652	SETUP PAPERBOARD BOXES. . . . .	4	5	.3	1.9	.3	.5	1.3	2.7	1.6	4.2	.1	.4	3.4
2653	CORRUGATED AND SOLID FIBER BOXES. . . . .	21	16	1.3	12.1	1.0	2.0	7.1	20.3	25.6	46.0	.7	1.3	14.1
27	PRINTING AND PUBLISHING. . . . .	687	188	19.6	179.0	11.2	21.8	97.6	355.9	205.8	558.3	17.1	18.6	232.7
2711	NEWSPAPERS. . . . .	80	37	6.0	50.5	2.7	4.8	23.7	94.2	28.0	122.3	5.0	5.6	65.2
2721	PERIODICALS. . . . .	58	16	2.3	22.7	.5	.9	3.3	63.5	77.1	139.7	.8	1.6	23.7
273	BOOKS. . . . .	42	9	.8	7.6	.4	.7	3.3	15.7	7.0	21.9	.6	.4	5.8
275	COMMERCIAL PRINTING. . . . .	364	82	6.6	61.7	5.1	10.2	43.4	107.4	64.7	171.6	7.3	(NA)	(NA)
2752	COMMERCIAL PRINTING, LITHOGRAPHIC. . . . .	165	55	4.2	41.9	3.3	6.6	29.3	71.6	40.8	111.9	3.3	(NA)	(NA)
2761	MANIFOLD BUSINESS FORMS. . . . .	16	11	.8	8.2	.6	1.2	5.9	20.1	15.9	36.1	1.4	.6	12.1
279	PRINTING TRADE SERVICES. . . . .	77	19	1.4	17.5	1.1	2.2	13.3	28.8	4.5	32.8	1.3	(NA)	(NA)
2793	PHOTOENGRAVING. . . . .	23	6	.6	9.1	.5	1.0	7.2	15.5	2.7	17.6	.4	.6	11.6
28	CHEMICALS AND ALLIED PRODUCTS. . . . .	157	65	12.9	129.6	7.2	14.9	67.2	460.3	333.2	805.8	28.3	11.5	378.8
283	DRUGS. . . . .	16	7	1.3	12.5	.6	1.3	4.9	46.0	21.4	69.3	1.3	2.9	48.8
284	SOAPS, CLEANERS, AND TOILET GOODS. . . . .	44	16	3.5	30.4	2.1	4.1	15.6	237.3	117.3	358.6	3.0	(NA)	(NA)
286	INDUSTRIAL ORGANIC CHEMICALS. . . . .	20	11	4.6	50.5	2.6	5.9	30.8	58.0	97.3	158.8	17.9	(NA)	(NA)
289	MISCELLANEOUS CHEMICAL PRODUCTS. . . . .	39	16	1.9	18.8	.7	1.3	5.2	44.3	41.3	84.9	2.3	(NA)	(NA)
2899	CHEMICAL PREPARATIONS, NEC. . . . .	26	10	.8	8.2	.3	.5	1.7	20.7	26.4	46.4	.9	(NA)	(NA)

See footnotes at end of table.

TABLE 3. General Statistics for the State, by Industry Groups and Industries: 1972 and 1967—Continued

(See appendix, Explanation of Terms)

Code	Industry	1972										1967		
		Establishments		All employees		Production workers			Value added by manufacture	Cost of materials <sup>1</sup>	Value of shipments <sup>1</sup>	Capital expenditures, new	All employees	Value added by manufacture
		Total	With 20 employees or more	Number	Payroll	Number	Man-hours	Wages						
		(number)	(number)	(1,000)	(million dollars)	(1,000)	(million)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(1,000)	(million dollars)
29	PETROLEUM AND COAL PRODUCTS. . .	25	4	0.5	5.0	0.3	0.7	3.5	17.3	14.4	31.8	1.6	0.4	11.2
30	RUBBER AND MISC. PLASTICS PROD. .	203	91	15.6	127.9	11.4	22.8	83.4	241.2	185.4	425.0	13.2	(NA)	(NA)
3079	MISCELLANEOUS PLASTICS PRODUCTS. . .	153	59	6.0	46.7	4.6	9.0	29.7	87.6	62.8	150.3	6.0	(NA)	(NA)
31	LEATHER AND LEATHER PRODUCTS . .	24	13	1.5	9.4	1.2	2.4	6.6	15.7	11.1	26.8	.2	2.2	15.6
32	STONE, CLAY, AND GLASS PRODUCTS. .	207	81	7.8	73.2	6.2	12.6	52.3	138.1	111.8	254.4	9.6	7.7	106.6
3231	PRODUCTS OF PURCHASED GLASS. . . . .	16	7	.7	5.3	.6	1.3	3.8	10.9	6.8	17.0	.1	.8	8.4
326	POTTERY AND RELATED PRODUCTS . . .	11	5	.6	5.3	.5	1.1	4.2	9.8	5.7	15.7	.3	CC	(D)
327	CONCRETE, GYPSUM, PLASTER PRODUCTS	117	40	2.1	22.4	1.5	3.2	14.6	44.4	41.2	85.8	4.3	1.9	35.0
3272	CONCRETE PRODUCTS, NEC . . . . .	57	15	1.0	9.4	.8	1.6	6.0	18.4	11.4	29.6	2.0	.7	10.2
3273	READY-MIXED CONCRETE . . . . .	41	17	.7	9.0	.5	1.0	5.9	18.3	22.2	40.9	1.9	.9	17.9
329	MISC. NONMETALLIC MINERAL PRODUCTS	37	23	3.1	28.8	2.4	5.0	20.3	55.0	42.2	101.6	1.6	(NA)	(NA)
33	PRIMARY METAL INDUSTRIES . . . . .	212	110	22.3	224.6	17.2	36.1	157.6	452.2	739.2	1 174.3	41.9	28.1	474.6
331	BLAST FURNACE, BASIC STEEL PROD. . .	18	16	3.9	45.0	2.9	6.1	30.7	96.8	137.2	232.0	7.4	5.2	99.6
3315	STEEL WIRE AND RELATED PRODUCTS. . .	8	7	1.3	13.3	1.0	2.1	9.4	29.7	28.2	56.6	1.1	1.3	22.1
332	IRON AND STEEL FOUNDRIES . . . . .	21	18	2.1	17.4	1.8	3.5	13.3	30.3	12.3	42.2	1.3	2.9	31.3
3321	GRAY IRON FOUNDRIES. . . . .	12	10	.9	7.0	.8	1.4	5.5	11.8	4.0	15.8	.5	1.8	19.1
3325	STEEL FOUNDRIES, NEC . . . . .	4	3	.4	3.2	.3	.6	2.3	6.1	2.8	8.9	(D)	(NA)	(NA)
335	NONFERROUS ROLLING AND DRAWING . .	63	53	13.5	138.0	10.3	22.1	96.8	279.3	554.4	819.4	30.3	15.9	292.5
3351	COPPER ROLLING AND DRAWING . . . . .	24	23	7.4	81.9	5.8	12.4	60.6	154.8	351.7	499.7	22.9	10.1	164.3
3357	NONFERROUS WIRE DRAWING, INSULATING.	30	23	5.0	45.4	3.7	7.8	28.9	90.8	143.1	230.0	6.2	4.8	95.8
336	NONFERROUS FOUNDRIES . . . . .	57	20	1.8	15.5	1.5	3.1	11.5	24.7	19.9	44.5	1.1	2.1	22.5
3361	ALUMINUM FOUNDRIES . . . . .	26	7	1.2	10.8	1.0	2.0	8.2	17.5	12.2	29.6	.5	1.2	13.0
3362	BRASS, BRONZE, AND COPPER FOUNDRIES.	20	9	.4	2.5	.3	.6	1.9	3.6	4.4	8.0	.2	.6	5.8
3369	NONFERROUS FOUNDRIES, NEC. . . . .	11	4	.3	2.2	.2	.4	1.4	3.6	3.3	7.0	.3	.3	3.7
34	FABRICATED METAL PRODUCTS. . . . .	941	374	53.7	484.9	39.2	79.5	305.6	920.7	628.2	1 532.3	50.6	(NA)	(NA)
342	CUTLERY, HANDTOOLS AND HARDWARE. .	87	54	16.2	140.9	12.0	23.7	90.7	315.7	156.7	459.1	15.2	16.6	229.6
3423	HAND AND EDGE TOOLS, NEC . . . . .	23	13	3.6	35.5	2.4	5.0	19.5	85.6	51.3	130.9	(D)	2.3	33.1
3429	HARDWARE, NEC. . . . .	50	32	9.8	81.1	7.4	14.2	55.2	149.9	81.0	228.1	8.3	11.4	133.3
343	PLUMBING, HEATING, EXC. ELECTRIC . .	18	9	1.2	9.3	.8	1.7	4.8	21.0	22.8	42.4	.7	(NA)	(NA)
344	FABRICATED STRUCTURAL METAL PROD. .	161	48	5.0	50.3	2.9	5.6	23.9	78.8	123.7	204.7	4.8	4.3	52.4
3441	FABRICATED STRUCTURAL METAL PRODUCTS	34	10	.9	10.6	.6	1.1	6.1	18.0	18.4	35.7	.8	.8	12.5
3443	FABRICATED PLATEWORK (BOILER SHOP) .	23	5	1.4	17.0	.5	.9	4.3	21.2	67.8	90.8	2.8	.9	10.8
3444	SHEET METALWORK. . . . .	57	15	.9	7.8	.6	1.3	4.9	12.7	11.3	24.2	.5	1.5	17.6
3446	ARCHITECTURAL METALWORK. . . . .	25	4	.8	7.1	.6	1.1	4.5	13.3	12.1	25.7	.6	(NA)	(NA)
345	SCREW MACHINE PRODUCTS, BOLTS, ETC	216	71	6.8	58.2	5.1	10.7	38.2	119.3	66.7	182.4	4.8	8.2	111.5
3451	SCREW MACHINE PRODUCTS . . . . .	166	45	3.2	24.4	2.6	5.1	16.8	43.8	23.5	66.4	2.2	4.4	52.5
3452	BOLTS, NUTS, RIVETS, AND WASHERS . .	50	26	3.7	33.8	2.5	5.6	21.4	75.4	43.3	116.0	2.6	3.8	59.0
346	METAL FORGINGS AND STAMPINGS . . . .	129	63	4.9	44.8	4.0	8.3	30.6	78.9	65.1	143.7	3.8	(NA)	(NA)
3469	METAL STAMPINGS, NEC . . . . .	114	49	3.2	28.1	2.7	5.6	19.4	51.5	39.9	91.0	3.0	(NA)	(NA)
347	METAL SERVICES, NEC. . . . .	133	33	2.4	19.6	1.9	3.9	13.3	36.2	14.5	50.5	1.9	3.0	35.9
3471	PLATING AND POLISHING. . . . .	111	29	2.2	17.5	1.7	3.5	12.2	31.9	12.4	44.2	(D)	2.7	31.5
349	MISC. FABRICATED METAL PRODUCTS. .	172	75	8.7	75.8	6.5	13.5	48.1	138.7	97.9	233.3	8.6	(NA)	(NA)
3494	VALVES AND PIPE FITTINGS . . . . .	22	12	1.9	17.5	1.3	2.7	10.6	33.3	22.4	55.5	1.2	1.9	26.9
3495	WIRE SPRINGS . . . . .	30	21	1.8	15.4	1.6	3.5	11.4	23.9	12.4	35.9	1.0	(NA)	(NA)
3496	MISC. FABRICATED WIRE PRODUCTS . . .	41	12	1.3	11.0	1.1	2.1	7.3	22.0	13.7	34.5	1.0	(NA)	(NA)
3499	FABRICATED METAL PRODUCTS, NEC . . .	61	22	2.7	23.3	2.0	4.1	13.8	41.3	38.4	78.6	5.0	(NA)	(NA)
35	MACHINERY, EXCEPT ELECTRICAL. . .	1 242	291	52.0	520.6	35.9	74.4	323.1	929.2	455.6	1 376.2	40.9	68.8	974.2
353	CONSTRUCTION AND RELATED MACHINERY	16	9	.5	5.3	.3	.6	2.6	10.6	8.8	19.4	.6	CC	(D)
354	METALWORKING MACHINERY . . . . .	478	106	11.7	123.1	8.2	17.7	78.7	207.9	86.9	292.1	6.8	20.4	304.5
3542	MACHINE TOOLS, METAL FORMING TYPES. .	24	12	2.0	21.8	1.2	2.7	11.6	31.4	18.6	49.1	1.2	2.1	33.3
3544	SPECIAL DIES, TOOLS, JIGS, FIXTURES. .	294	44	3.0	32.7	2.4	5.3	23.7	51.8	17.5	69.2	2.8	4.2	59.7
3545	MACHINE TOOL ACCESSORIES . . . . .	93	26	3.1	29.7	2.1	4.3	18.2	54.9	18.4	72.9	1.2	3.0	45.2
3549	METALWORKING MACHINERY, NEC. . . . .	17	5	.4	4.4	.3	.6	2.6	7.1	3.5	10.5	.7	(NA)	(NA)
355	SPECIAL INDUSTRY MACHINERY . . . . .	76	32	5.8	61.9	3.7	7.7	34.9	116.8	77.0	192.4	10.3	5.2	86.3
3551	FOOD PRODUCTS MACHINERY. . . . .	8	4	.6	6.3	.4	.9	3.9	10.8	6.2	17.0	.2	.7	12.5
3559	SPECIAL INDUSTRY MACHINERY, NEC. . .	16	16	3.7	40.1	2.4	4.9	22.4	76.0	52.7	125.6	9.1	3.1	49.0
356	GENERAL INDUSTRIAL MACHINERY . . . .	108	44	16.2	161.3	12.8	26.6	122.4	289.1	121.3	407.3	11.6	21.2	305.6
3569	GENERAL INDUSTRIAL MACHINERY, NEC. .	31	10	1.3	9.9	.8	1.6	5.8	22.6	12.4	36.0	1.0	2.3	29.8
357	OFFICE AND COMPUTING MACHINES. . .	28	16	8.8	88.3	3.9	7.8	29.3	158.0	77.3	236.3	7.4	10.2	128.2
358	REFRIGERATION, SERVICE MACHINERY . .	22	11	1.4	12.6	.9	1.9	7.1	29.0	27.7	56.5	.4	1.4	19.5
359	MISC. MACHINERY, EXCEPT ELECTRICAL	498	63	5.3	44.9	4.1	8.2	31.5	74.5	35.5	108.6	2.5	(NA)	(NA)
36	ELECTRIC, ELECTRONIC EQUIPMENT . . .	370	191	40.4	360.1	26.0	52.2	186.1	718.1	438.3	1 168.8	20.5	(NA)	(NA)
361	ELECTRIC DISTRIBUTING EQUIPMENT. . .	26	16	4.8	43.7	2.9	6.1	22.0	88.6	71.0	155.4	2.9	(NA)	(NA)
362	ELECTRICAL INDUSTRIAL APPARATUS. . .	56	27	4.0	36.9	2.1	4.1	15.6	44.6	49.6	102.9	1.3	4.8	66.8
363	HOUSEHOLD APPLIANCES . . . . .	14	11	4.9	40.2	3.8	7.2	26.5	109.8	71.0	192.4	2.3	5.2	109.3
364	ELECT. LIGHTING AND WIRING EQUIP. . .	60	30	8.2	69.8	6.4	12.6	47.2	156.7	78.5	227.8	3.8	8.2	110.8
3643	CURRENT-CARRYING WIRING DEVICES. . .	26	15	6.2	53.9	4.9	9.7	36.8	122.1	55.5	170.6	2.5	FF	(D)
3644	NONCURRENT-CARRYING WIRING DEVICES .	6	4	1.3	10.6	1.0	2.0	7.4	22.0	12.4	33.9	1.1	EE	(D)
366	COMMUNICATION EQUIPMENT. . . . .	52	35	8.4	89.4	3.6	7.3	28.1	171.9	73.0	247.2	3.8	9.2	122.0

See footnotes at end of table.



TABLE 3. General Statistics for the State, by Industry Groups and Industries: 1972 and 1967—Continued

(See appendix, Explanation of Terms)

Code	Industry	1972										1967		
		Establishments		All employees		Production workers			Value added by manufacture	Cost of materials <sup>1</sup>	Value of shipments <sup>1</sup>	Capital expenditures, new	All employees	Value added by manufacture
		Total	With 20 employees or more	Number	Payroll	Number	Man-hours	Wages						
		(number)	(number)	(1,000)	(million dollars)	(1,000)	(million)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(1,000)	(million dollars)
367	ELECTRONIC COMPONENTS AND ACCESS .	96	56	7.9	63.0	5.8	12.0	37.2	116.2	65.3	183.2	4.4	13.8	130.5
369	MISC. ELECTRICAL EQUIP., SUPPLIES.	52	14	2.0	16.0	1.4	2.6	8.9	28.3	28.4	56.2	2.0	1.8	21.0
3699	ELECTRICAL EQUIPMENT, SUPPLIES, NEC.	34	5	.4	3.9	.3	.6	2.0	8.1	5.6	13.1	.1	.2	2.0
37	TRANSPORTATION EQUIPMENT . . . .	152	72	75.2	866.5	40.9	84.3	391.0	1 249.6	1 101.6	2 306.8	30.0	(NA)	(NA)
371	MOTOR VEHICLES AND EQUIPMENT . . .	26	8	2.2	16.5	1.7	3.4	12.1	40.9	25.8	62.4	1.1	4.5	68.3
3732	BOAT BUILDING AND REPAIRING. . . . .	29	5	.4	3.1	.3	.5	2.1	7.1	4.7	11.4	.5	.3	3.7
38	INSTRUMENTS AND RELATED PRODUCTS	179	93	18.7	173.2	11.6	22.7	82.3	372.5	232.7	588.6	23.6	(NA)	(NA)
3811	ENGINEERING, SCIENTIFIC INSTRUMENTS.	26	14	1.8	20.0	.8	1.7	6.8	32.1	11.2	42.6	1.4	EE	(D)
382	MEASURING AND CONTROLLING DEVICES.	67	36	5.7	53.6	3.4	6.2	24.5	78.9	46.5	126.6	2.9	(NA)	(NA)
3825	INSTRUMENTS TO MEASURE ELECTRICITY .	26	13	1.1	9.4	.7	1.1	4.7	14.8	9.8	24.4	.6	(NA)	(NA)
3829	MEASURING, CONTROLLING DEVICES, NEC.	26	11	1.0	9.3	.6	1.1	4.1	15.8	11.1	26.7	.4	(NA)	(NA)
384	MEDICAL INSTRUMENTS AND SUPPLIES .	44	21	3.8	29.8	2.8	5.6	18.4	77.6	48.3	126.6	5.9	4.5	53.5
3841	SURGICAL AND MEDICAL INSTRUMENTS . .	19	9	1.8	14.1	1.4	2.8	9.7	36.5	21.8	57.7	2.2	EE	(D)
3873	WATCHES, CLOCKS, AND WATCHCASES. . .	13	10	4.5	39.2	3.1	6.1	21.1	81.9	82.0	164.2	10.6	(NA)	(NA)
39	MISC. MANUFACTURING INDUSTRIES .	252	101	14.0	116.1	10.6	21.5	76.6	230.5	176.3	404.7	14.1	15.7	233.3
394	TOYS AND SPORTING GOODS. . . . .	47	22	1.3	9.2	1.0	1.9	5.9	18.3	12.9	31.4	1.6	EE	(D)
3949	SPORTING AND ATHLETIC GOODS, NEC . .	30	15	.9	6.7	.7	1.3	4.3	12.5	8.8	21.5	1.2	.9	7.0
396	COSTUME JEWELRY AND NOTIONS. . . .	45	29	5.6	44.5	4.4	8.9	30.8	85.6	63.0	150.2	7.6	5.6	56.0
3964	NEEDLES, PINS, AND FASTENERS . . . .	27	18	3.4	28.9	2.7	5.4	20.0	56.6	42.0	100.6	5.9	3.1	34.4
399	MISCELLANEOUS MANUFACTURES . . . .	99	20	1.8	15.8	1.3	2.4	8.7	23.4	25.7	47.3	1.2	2.1	55.4
3993	SIGNS AND ADVERTISING DISPLAYS . . .	52	6	.6	4.4	.5	.8	2.8	8.7	5.9	14.4	.2	.3	3.9
3999	MANUFACTURING INDUSTRIES, NEC. . . .	39	11	.6	5.4	.5	.9	2.9	8.6	6.0	14.3	.3	1.0	16.3
--	ADMINISTRATIVE AND AUXILIARY . .	198	98	20.4	296.6	-	-	-	-	-	-	-	16.0	-

Note: The following symbols indicate employment size range for 1967:

AA less than 250 employees      EE 1,000 to 2,499 employees  
BB 250 to 499 employees      FF 2,500 employees and over  
CC 500 to 999 employees

- Represents zero. (NA) Not available. Because of a revision to this industry or industry group in the 1972 edition of the SIC manual, 1967 census data are not available on a comparable basis. (D) Withheld to avoid disclosing figures for individual companies. (Z) Less than half of the unit of measurement shown.

<sup>1</sup>The total cost of materials and value of shipments for industry groups shown may include extensive duplication arising from shipments between establishments in the same industry classification. (For a more complete explanation, see appendix.)

<sup>2</sup>Includes figures for industry groups which have been withheld from publication in order to (a) avoid disclosing figures for individual companies or (b) permit further checking of figures for smaller industry groups. Additional detail will appear in the final report for this State.

## Appendix A. SCOPE AND COVERAGE

This report is one of a series presenting preliminary information, by State, from the 1972 Census of Manufactures. The data will be superseded in a final report which, in turn, will be included in *Volume III, Area Statistics, 1972 Census of Manufactures*. The final report will include a comprehensive discussion of the concepts and definitions used in the census.

The census of manufactures covers each manufacturing establishment in the United States with one paid employee or more; manufacturing establishments with no employees are excluded. Firms which operated more than one establishment were required to file a separate report for each location. Companies which engaged in distinctly different lines of activity at one location were asked to submit separate reports if the company records permitted such a separation and the activities were of significant size.

This report includes figures for administrative offices, warehouses, garages, or other auxiliary units which service manufacturing establishments.

In the 1972 census, the approximately 120,000 manufacturing establishments with fewer than 10 employees were excused from filing reports. Under special arrangements which safeguarded the confidentiality of both tax and census records, data on payrolls, sales, and industry classification from the administrative records of the Social Security Administration and the Internal Revenue Service were made available to the Census Bureau for use in the 1972 Economic Censuses (retail and wholesale trade, service industries, construction industries, manufactures, and mineral industries). Estimates for data other than payrolls and sales for these small establishments were constructed from industry averages. The effect on industry aggregates is slight in most industries. For manufacturing as a whole, these small establishments account for less than 3 percent of the payrolls and value added.

Establishments are classified by industry in accordance with industry definitions described in the 1972 edition of the Standard Industrial Classification (SIC) Manual. For 1972, the SIC was significantly revised and the comparability with prior year's data for some industries was significantly affected. The comparability at the 2- and 3-digit SIC levels was less affected. The final volumes of the 1972 Census of Manufactures will contain a table relating aggregates based on the 1972 SIC with aggregates derived from classifying establishments according to the 1967 SIC definitions.

As in earlier censuses, a number of small establishments may have been misclassified as to industry. However, such possible misclassifications have significant effect on *none* of the statistics except the number of establishments. As indicated above, report forms were not mailed to very small establishments (fewer than 10 employees). The industry classifications for these establishments were assigned on the basis of brief descriptions of the general activity of the establishment. Where the description is incomplete or there are relatively fine lines of demarcation among industries or between manufacturing and nonmanufacturing activity, the code assigned to an establishment could differ from that which would have been assigned on the basis of more complete product information. Therefore, the total establishment count for individual industries should be viewed as an approximation rather than a precise measurement. The counts for establishments with 20 employees or more are more reliable than the total number of establishments.

More detailed figures for this State will appear in the final census reports. Final reports will also include a comprehensive discussion of such concepts as "industry" and "establishment," as well as the various statistical items such as "employment," "value of shipments," and "value added." Similar preliminary and final reports will be issued for other States during the coming months. A series of preliminary summary reports showing U.S. totals for each manufacturing industry and for each State are being issued. Final industry reports and final area reports will be published during 1974.

Order forms describing the individual reports and listing their prices may be obtained from any U.S. Department of Commerce district office or from the Publications Distribution Section, Social and Economic Statistics Administration, Washington, D.C. 20233.

The 1972 Census of Manufactures is the 29th census of manufacturing establishments in the United States. For 1972, it was conducted jointly with the censuses of mineral industries, construction industries, retail trade, wholesale trade, and selected services under authority of Title 13 of the United States Code. Title 13 specifies that a census of manufactures be conducted every 5 years and, as amended, to cover years ending in "2" and "7". Title 13 also authorizes an annual sample survey of manufacturing establishments in interim years.



## Appendix B. EXPLANATION OF TERMS

*(For a more complete discussion of these terms and the method of compiling the Census of Manufactures, see the "Introduction" to the 1967 Census of Manufactures, Volume III).*

**All Employees**—All full-time and part-time employees on the payrolls of operating manufacturing establishments for any part of the pay period ending nearest the 12th of the months specified on the report form. Included are all persons on paid sick leave, paid holidays, and paid vacations during these pay periods. Officers of corporations are included as employees; proprietors and partners of unincorporated firms are excluded. The "all employee" number is the average number of production workers for the midmonth payroll period of March, May, August, and November plus the number of nonproduction employees in mid-March.

**Number of Production Workers**—Workers (up through the working foreman level) engaged in fabricating, processing, assembling, inspecting, receiving, packing, warehousing, shipping (but not delivering), and maintenance, repair, janitorial, and watchman services, product development, auxiliary production for plant's own use (e.g., powerplant), recordkeeping, and other closely associated services. Proprietors and partners are excluded.

**Payroll**—This item includes all forms of compensation such as salaries, wages, commissions, dismissal pay, bonuses, vacation and sick leave pay, and compensation in kind, prior to such deductions as employees' Social Security contributions, withholding taxes, group insurance, union dues, and savings bonds. The total includes salaries of officers of these establishments, if a corporation; it excludes payments to the proprietor or partners, if an unincorporated concern. Respondents were told that in reporting they could follow the definition of payrolls used for calculating the Federal withholding tax.

**Man-Hours of Production Workers**—This total relates to production-worker man-hours worked or paid for at the plant including actual overtime hours (not straight-time equivalent hours). It excludes hours paid for vacation, holidays, or sick leave when the employee was not at the plant.

**Cost of Materials**—The term "Cost of Materials" refers to charges actually paid or payable for items consumed or put into production during the year, including freight and other direct charges incurred by the establishment in acquiring these materials. It includes the cost of materials or fuel consumed regardless of

whether these items were purchased by the establishment from other companies, transferred to it from other establishments of the same company, or withdrawn from inventory during the year. The establishment was requested to value materials transferred from other parts of the company at its approximate market value, not at cost of production. The important components of this cost item are (a) all raw materials, semifinished goods, parts, components, containers, scrap, and supplies put into production or used as operating supplies and for repair and maintenance during the year; (b) electric energy purchased; (c) fuels consumed for heat, power, or the generation of electricity; (d) work done by others on materials or parts furnished by manufacturing establishments (contract work); and (e) products bought and resold in the same condition.

**Value of Shipments**—The value of shipments is the received or receivable net selling value, f.o.b. plant (exclusive of freight and taxes), of all products shipped, both primary and secondary, as well as all miscellaneous receipts such as receipts for contract work performed for others, installation and repair, sales of scrap, and sale of products bought and resold without further processing. Included are all items made by the establishment or for it under contract from materials owned by it whether sold, transferred to other plants of the same company, or shipped on consignment. The net selling value of products made in one plant on a contract basis from materials owned by another was reported by the plant providing the materials.

In the case of multiunit companies, the manufacturer was requested to report the value of products transferred to other establishments of the same company at full economic value; i.e., to include not only the direct costs of production but also a reasonable proportion of "all other costs" (including company overhead) and profit.

**Duplication in Cost of Materials and Value of Products**—The aggregate cost of materials and value-of-shipments figures for industry groups and for all manufacturing industries may include large amounts of duplication since the products of some industries are used as materials by others. With some important exceptions, such as motor vehicles and parts, this duplication is not significant within individual industries but arises from the addition of the totals of related industries in successive stages of the production of a finished manufactured product. Examples are the addition of flour mills to bakeries in the food group and the addition of pulp mills to paper mills in the paper and allied products group of industries. Esti-



mates of this duplication indicate that the value of manufactured products exclusive of such duplication—the value of finished manufactures—approximates two-thirds of the total value of products.

Prior to 1962, the Bureau of the Census did not publish figures for cost of materials or value of shipments if they contained significant duplication. Effective with the 1962 annual survey these figures were shown at all industry levels for the United States to meet the requests for their use in studies in which the presence of an indeterminate amount of duplication is not a limiting factor. However, they are appropriately footnoted. Effective with the 1964 annual survey, these industry group totals are also shown at the State, standard metropolitan statistical area, and large-county level.

Even where there is no significant amount of duplication, value-of-shipments figures are deficient as measures of the relative economic importance of individual manufacturing industries or geographic areas because of the wide variation in ratio of materials, labor, and other processing costs to value of shipments among industries.

**Value Added by Manufacture**—This measure of manufacturing activity is derived by subtracting the cost of materials, supplies, containers, fuel, purchased electricity, and cost of resales contract work from the value of shipments for products manufactured plus resales and receipts for services rendered. The result of this calculation is adjusted by the net change in finished goods and work-in-process inventories between the beginning and end of the year. (In the few industries that report value of production rather than value of shipments, only changes in work-in-process inventories are used to adjust value added. In the shipbuilding and repairing industry, no inventory adjustment is made.)

“Value added” avoids the duplication in the value of shipments figure which results from the use of products of some establishments as materials by others. Value added is considered to be the best value measure available for comparing the relative economic importance of manufacturing among industries and geographic areas.

**Expenditures for Plant and Equipment**—Manufacturing establishments in operation and establishments under construction but not yet in operation, were asked to report their expenditures for (a) permanent additions and major alterations to the manufacturing establishment, and (b) new machinery and equipment used for replacement purposes and additions to plant capacity if they are of the type for which depreciation accounts are ordinarily maintained.

These totals exclude expenditures for new facilities and equipment leased from nonmanufacturing concerns; new facilities owned by the Federal Government but operated under contract by private companies; and plant and equipment furnished to the manufacturer by communities and nonprofit organizations. Expenditures for used plant and equipment (although reported in the census), expenditures for land, and cost of maintenance and repairs charged as current operating expense are also omitted from the figures for new capital expenditures.

**Central Administrative Offices and Auxiliary Units**—In the 1972 census as in previous years, respondents were asked to file separate reports for central administrative offices or auxiliary units which were (1) at different locations from the establishments served or, (2) at the same location as one of these establishments but were not operated as an integral part thereof and served two or more establishments. The functions of employees in central administrative offices include general company policy determination, planning and management (that is, company purchasing, accounting, general engineering, direction of company personnel matters, and legal and patent matters). Auxiliaries are storage facilities, garages, repair shops, purchasing offices, sales promotion offices, and research laboratories serving the plants or central management of the company.

**Standard Metropolitan Statistical Areas**—Standard metropolitan statistical areas (SMSA) are integrated economic and social units with a large volume of daily travel and communication between the central city and outlying parts of the area.<sup>1</sup> Each area (except in New England) consists of one whole county or more. An area may contain not only highly industrialized counties but also adjoining counties which, though primarily residential in character, contribute significantly to the industrial counties' labor force and are socially and economically integrated with the central city. These areas are defined by the Federal Committee on Standard Metropolitan Statistical Areas of the Office of Management and Budget for general-purpose use throughout the Federal Government in presenting economic and social data. In the New England States, similar intergration criteria are applied in defining

<sup>1</sup> Each standard metropolitan statistical area must include either (1) a city with 50,000 or more inhabitants, or (2) a city having a population of at least 25,000 which (a) with the addition of the population of contiguous places has a population density of at least 1,000 persons per square mile; (b) constitutes, for general economic and social purposes, a single community with a combined population of at least 50,000; and (c) includes a total population of at least 75,000 in the county or counties in which the city and contiguous places are located.



SMSA's on a city and town basis because towns rather than counties are regarded as the significant unit in this region of the country.

The requirement that each SMSA consist of county units (except in New England) sometimes results in the inclusion in an area of considerable amount of territory which would not ordinarily be considered "metropolitan," much less "industrial." It is recognized that metropolitan areas could be more accurately defined in terms of smaller area segments such as minor civil

divisions, but the usefulness of areas so defined would be limited by the fact that many types of economic and social data are available only on a county basis.

Each SMSA is designated by the name of the principal city of the area. In addition to the name of the principal city, the area title may include one or two additional city names.

The data for SMSA's which changed definition since the 1967 census have not been retabulated on the new basis for years prior to 1972.



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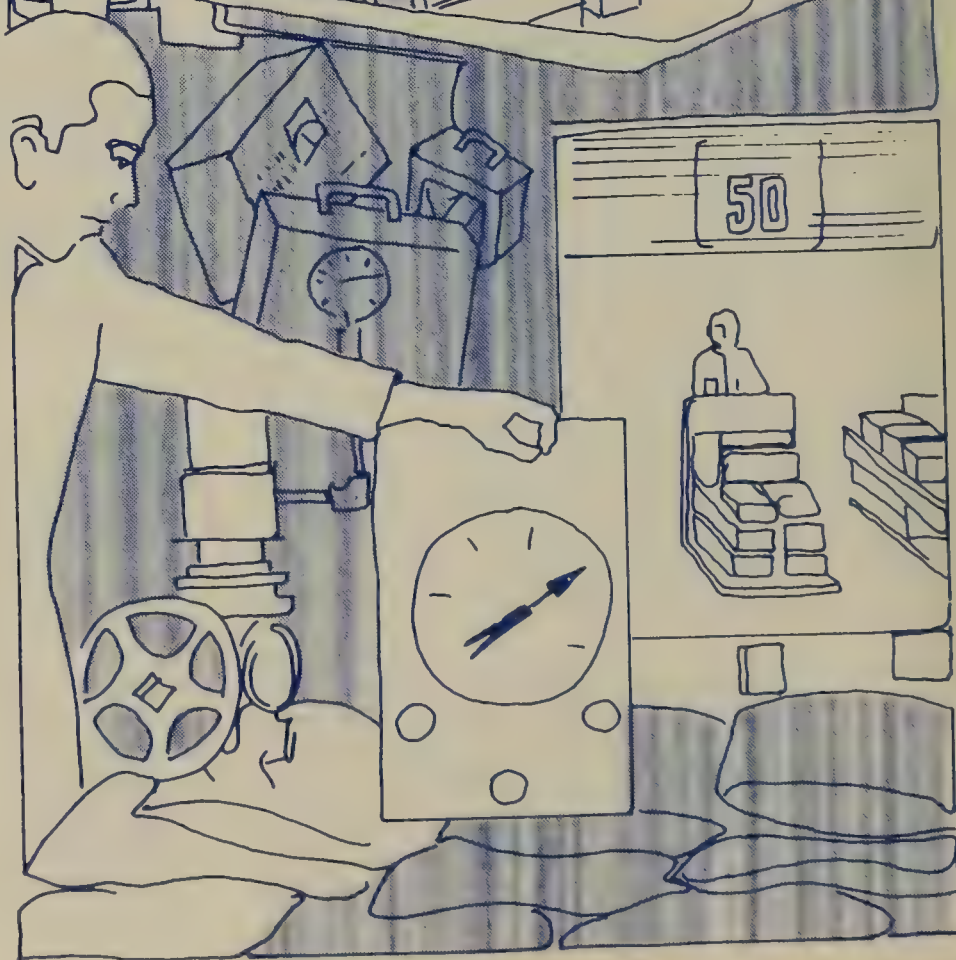
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# 1972 CENSUS OF MANUFACTURES

## AREA SERIES

C72(P)-S8

U. S. DEPARTMENT OF COMMERCE • Social and Economic Statistics Administration • BUREAU OF THE CENSUS

ued April 1974

## Delaware

Value added by manufacturing in 1972 in the State of Delaware amounted to \$1,309 million, a 2-percent increase from 1971 and a 37-percent increase from 1967.

This report presents preliminary results from the 1972 Census of Manufactures for the State, its Standard Metropolitan Statistical Area, and its counties.

Data are provided for industry groups within the State. Historical data, back to 1958, are included for the State as a whole,

and 1967 figures on employment and value added are provided for the smaller areas.

The figures in this report have been subjected to only preliminary review and must be regarded as approximations of the final census figures. No adjustments have been made in the value figures for changes in price level.

For an explanation of the terms used in the tables, see the appendix at the end of this report.

TABLE 1. General Statistics for the State: 1972 and Earlier Years

(See appendix, Explanation of Terms)

Year	Establishments		All employees <sup>1</sup>		Production workers			Value added by manufacture	Cost of materials <sup>2</sup>	Value of shipments <sup>2</sup>	Capital expenditures, new
	Total	With 20 employees or more	Number	Payroll	Number	Man-hours	Wages				
	(number)	(number)	(1,000)	(million dollars)	(1,000)	(millions)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(million dollars)
DELAWARE											
1972 Census .....	566	246	70.2	768.9	37.7	73.9	306.4	1,308.5	2,121.9	3,417.4	91.7
1971 ASM .....	(NA)	(NA)	69.6	734.8	34.5	71.5	282.2	1,281.0	1,951.8	3,222.0	78.2
1970 ASM .....	(NA)	(NA)	70.8	702.1	35.6	69.5	244.9	1,071.3	1,564.0	2,631.2	67.5
1969 ASM .....	(NA)	(NA)	76.4	700.5	41.5	81.1	264.9	1,151.6	1,685.3	2,829.3	76.5
1968 ASM .....	(NA)	(NA)	74.5	676.1	39.9	79.3	253.6	1,202.9	1,600.6	2,794.1	94.7
1967 Census .....	528	253	70.7	588.4	38.8	75.8	228.1	958.4	1,520.8	2,484.3	115.9
1966 ASM .....	(NA)	(NA)	68.4	574.4	35.6	72.3	212.2	955.5	1,529.2	2,467.0	90.8
1965 ASM .....	(NA)	(NA)	66.0	538.3	34.6	72.2	206.8	877.1	1,539.6	2,416.6	70.3
1964 ASM .....	(NA)	(NA)	62.5	484.2	32.6	65.7	177.8	772.1	1,176.1	1,933.7	72.7
1963 Census .....	569	243	58.3	429.6	30.4	61.5	159.0	658.2	(NA)	(NA)	88.8
1962 ASM .....	(NA)	(NA)	57.3	376.5	29.3	58.2	145.5	542.4	(NA)	(NA)	57.8
1961 ASM .....	(NA)	(NA)	55.6	358.3	28.2	55.5	132.4	464.5	(NA)	(NA)	58.2
1960 ASM .....	(NA)	(NA)	58.7	371.0	31.6	61.0	146.2	516.5	(NA)	(NA)	58.8
1959 ASM .....	(NA)	(NA)	58.0	359.4	31.0	61.7	136.9	517.2	(NA)	(NA)	25.1
1958 Census .....	569	222	57.8	347.6	30.0	57.3	125.2	419.8	(NA)	(NA)	27.9

Note: "ASM" data are based on a representative sample of manufacturing establishments canvassed in the Annual Survey of Manufactures. These estimates may differ from the results of a complete canvass of all manufacturing establishments. The standard errors associated with these estimates are published in the annual survey of manufactures volumes for this period. For comparative purposes, the 1972 ASM estimate for the State of Delaware was 69 thousand employees, and \$1,318 million in value added with corresponding standard error of estimate of 2 and 1.

(NA) Not available.

<sup>1</sup>Includes employment and payroll at central administrative offices and auxiliary units. (For a definition of these units, see appendix.)

<sup>2</sup>The total cost of materials and value of shipments may include extensive duplication arising from shipments between establishments in the same industry classification. (For a more complete explanation, see appendix.)

TABLE 2. General Statistics for the State, Standard Metropolitan Statistical Areas, and Counties: 1972 and 1967

(See appendix, Explanation of Terms)

State, standard metropolitan statistical areas, and counties <sup>1</sup>	1972											1967	
	Establishments		All employees <sup>2</sup>		Production workers			Value added by manufac- ture	Cost of materials <sup>3</sup>	Value of shipments <sup>3</sup>	Capital expendi- tures, new	All employees	Value added by manufac- ture
	Total	With 20 employees or more	Number	Payroll	Number	Man-hours	Wages						
	(number)	(number)	(1,000)	(million dollars)	(1,000)	(million)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(1,000)	(million dollars)
DELAWARE, TOTAL. . . . .	566	246	70.2	768.9	37.7	73.9	306.4	1 308.5	2 121.9	3 417.4	91.7	70.7	958.4
STANDARD METROPOLITAN STATISTICAL AREAS <sup>4</sup>													
WILMINGTON . . . . .	487	211	64.9	772.9	33.0	64.8	305.6	1 168.2	2 037.0	3 209.1	89.1	67.9	846.0
PORTION IN NEW JERSEY . . . . .	56	28	10.8	122.9	7.8	14.8	76.4	306.1	329.9	638.4	23.8	10.7	185.5
PORTION IN DELAWARE . . . . .	377	155	50.4	622.6	22.4	44.5	211.8	809.5	1 642.9	2 454.9	62.7	53.1	619.7
PORTION IN MARYLAND . . . . .	54	28	3.7	27.4	2.8	5.5	17.4	52.6	64.2	115.8	2.6	4.1	40.8
COUNTIES													
KENT . . . . .	73	32	8.6	61.9	6.4	12.3	37.2	253.6	221.7	469.5	9.9	7.8	163.4
NEW CASTLE . . . . .	377	155	50.4	622.6	22.4	44.5	211.8	809.5	1 642.9	2 454.9	62.7	53.1	619.7
SUSSEX . . . . .	115	58	11.2	84.1	8.9	17.6	57.2	244.9	256.2	491.5	19.0	9.8	175.2

<sup>1</sup>Some counties were withheld from publication in order to (a) avoid disclosing figures for individual companies or (b) permit further checking of the figures for smaller counties. Additional detail will appear in the final report for this State.

<sup>2</sup>Includes employment and payroll at central administrative offices and auxiliary units. (For a definition of these units, see appendix.)

<sup>3</sup>The total cost of materials and value of shipments may include extensive duplication arising from shipments between establishments in the same industry classification. (For a more complete explanation, see appendix.)

<sup>4</sup>The standard metropolitan statistical area in this State is defined as follows:

Wilmington, DE-NJ-MD, SMSA: Consists of New Castle County, DE; Salem County, NJ; and Cecil County, MD.

TABLE 3. General Statistics for the State, by Industry Groups and Industries: 1972 and 1967

(See appendix, Explanation of Terms)

Code	Industry	1972										1967		
		Establishments		All employees		Production workers			Value added by manufacture	Cost of materials <sup>1</sup>	Value of shipments <sup>1</sup>	Capital expenditures, new	All employees	Value added by manufacture
		Total	With 20 employees or more	Number	Payroll	Number	Man-hours	Wages						
		(number)	(number)	(1,000)	(million dollars)	(1,000)	(million)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(1,000)	(million dollars)
	ALL INDUSTRIES, TOTAL <sup>2</sup> . . . . .	566	246	70.2	768.9	37.7	73.9	306.4	1 308.5	2 121.9	3 417.4	91.7	70.7	958.4
20	FOOD AND KINDRED PRODUCTS. . . . .	81	47	8.3	54.8	6.6	13.2	37.0	216.0	306.7	522.6	13.7	8.7	156.5
201	MEAT PRODUCTS. . . . .	15	10	2.0	11.4	1.8	3.6	9.4	23.1	67.2	90.7	1.4	2.4	17.3
2016	POULTRY DRESSING PLANTS. . . . .	7	6	1.7	9.6	1.6	3.1	8.2	15.6	58.5	73.6	1.3	(NA)	(NA)
203	PRESERVED FRUITS AND VEGETABLES. . . . .	18	13	2.1	9.1	1.9	3.5	7.2	22.9	32.6	55.5	7.1	(NA)	(NA)
2033	CANNED FRUITS AND VEGETABLES. . . . .	11	8	1.5	7.2	1.4	2.8	5.8	17.6	27.1	44.7	1.3	2.2	21.5
22	TEXTILE MILL PRODUCTS. . . . .	9	7	1.2	6.5	.9	2.3	5.5	13.7	9.9	23.0	.4	1.6	13.2
229	MISCELLANEOUS TEXTILE GOODS. . . . .	4	3	.3	2.4	.3	1.0	1.7	5.7	4.7	9.8	.2	BB	(D)
23	APPAREL, OTHER TEXTILE PRODUCTS. . . . .	30	20	1.8	8.3	1.6	2.5	6.8	16.4	13.9	30.3	.3	2.8	44.6
233	WOMEN'S, AND MISSES' OUTERWEAR. . . . .	13	10	.5	2.3	.4	.7	1.8	6.2	9.2	15.2	.1	BB	(D)
24	LUMBER AND WOOD PRODUCTS . . . . .	36	8	.4	2.4	.4	.6	1.8	4.7	6.3	10.9	.7	(NA)	(NA)
25	FURNITURE AND FIXTURES . . . . .	9	2	.3	1.9	.2	.4	1.1	3.3	2.9	6.1	.1	.2	1.7
27	PRINTING AND PUBLISHING. . . . .	73	13	1.6	16.0	1.0	1.9	9.4	26.1	10.0	36.1	1.3	1.5	18.7
275	COMMERCIAL PRINTING. . . . .	42	5	.5	4.8	.4	.8	3.2	6.0	4.1	10.8	.4	(NA)	(NA)
28	CHEMICALS AND ALLIED PRODUCTS. . . . .	40	22	7.7	89.0	5.0	10.0	49.6	297.2	228.4	523.2	43.5	FF	(D)
281	INDUSTRIAL INORGANIC CHEMICALS. . . . .	7	4	1.7	20.1	1.1	2.3	12.3	62.7	60.7	123.4	14.6	(NA)	(NA)
282	PLASTICS MATERIALS AND SYNTHETICS. . . . .	6	6	4.4	49.8	3.0	5.9	29.6	179.4	137.1	314.7	19.6	(NA)	(NA)
30	RUBBER AND MISC. PLASTICS PROD. . . . .	32	21	5.1	42.6	3.8	7.3	29.0	119.2	96.3	210.3	7.0	(NA)	(NA)
33	PRIMARY METAL INDUSTRIES . . . . .	9	4	2.4	22.5	1.8	3.6	16.2	35.9	52.5	88.0	1.8	2.5	23.1
34	FABRICATED METAL PRODUCTS. . . . .	36	12	1.2	10.6	.9	1.6	6.8	21.3	15.7	36.4	.5	(NA)	(NA)
344	FABRICATED STRUCTURAL METAL PROD. . . . .	21	8	.5	4.7	.3	.6	2.7	10.3	10.6	20.9	.1	.7	6.9
35	MACHINERY, EXCEPT ELECTRICAL. . . . .	54	11	3.0	27.0	2.3	4.9	18.6	42.0	28.8	68.2	2.4	1.4	13.3
36	ELECTRIC, ELECTRONIC EQUIPMENT . . . . .	13	8	.9	7.0	.7	1.2	4.1	11.1	15.0	25.6	.8	(NA)	(NA)
--	ADMINISTRATIVE AND AUXILIARY . . . . .	34	21	20.7	316.7	-	-	-	-	-	-	-	20.1	-

Note: The following symbols indicate employment size range for 1967:

AA less than 250 employees      EE 1,000 to 2,499 employees  
BB 250 to 499 employees      FF 2,500 employees and over  
CC 500 to 999 employees

- Represents zero. (NA) Not available. Because of a revision to this industry or industry group in the 1972 edition of the SIC manual, 1967 census data are not available on a comparable basis. (D) Withhold to avoid disclosing figures for individual companies.

<sup>1</sup>The total cost of materials and value of shipments for industry groups shown may include extensive duplication arising from shipments between establishments in the same industry classification. (For a more complete explanation, see appendix.)

<sup>2</sup>Includes figures for industry groups which have been withheld from publication in order to (a) avoid disclosing figures for individual companies or (b) permit further checking of figures for smaller industry groups. Additional detail will appear in the final report for this State.



## Appendix A. SCOPE AND COVERAGE

This report is one of a series presenting preliminary information, by State, from the 1972 Census of Manufactures. The data will be superseded in a final report which, in turn, will be included in *Volume III, Area Statistics, 1972 Census of Manufactures*. The final report will include a comprehensive discussion of the concepts and definitions used in the census.

The census of manufactures covers each manufacturing establishment in the United States with one paid employee or more; manufacturing establishments with no employees are excluded. Firms which operated more than one establishment were required to file a separate report for each location. Companies which engaged in distinctly different lines of activity at one location were asked to submit separate reports if the company records permitted such a separation and the activities were of significant size.

This report includes figures for administrative offices, warehouses, garages, or other auxiliary units which service manufacturing establishments.

In the 1972 census, the approximately 120,000 manufacturing establishments with fewer than 10 employees were excused from filing reports. Under special arrangements which safeguarded the confidentiality of both tax and census records, data on payrolls, sales, and industry classification from the administrative records of the Social Security Administration and the Internal Revenue Service were made available to the Census Bureau for use in the 1972 Economic Censuses (retail and wholesale trade, service industries, construction industries, manufactures, and mineral industries). Estimates for data other than payrolls and sales for these small establishments were constructed from industry averages. The effect on industry aggregates is slight in most industries. For manufacturing as a whole, these small establishments account for less than 3 percent of the payrolls and value added.

Establishments are classified by industry in accordance with industry definitions described in the 1972 edition of the Standard Industrial Classification (SIC) Manual. For 1972, the SIC was significantly revised and the comparability with prior year's data for some industries was significantly affected. The comparability at the 2- and 3-digit SIC levels was less affected. The final volumes of the 1972 Census of Manufactures will contain a table relating aggregates based on the 1972 SIC with aggregates derived from classifying establishments according to the 1967 SIC definitions.

As in earlier censuses, a number of small establishments may have been misclassified as to industry. However, such possible misclassifications have significant effect on *none* of the statistics except the number of establishments. As indicated above, report forms were not mailed to very small establishments (fewer than 10 employees). The industry classifications for these establishments were assigned on the basis of brief descriptions of the general activity of the establishment. Where the description is incomplete or there are relatively fine lines of demarcation among industries or between manufacturing and nonmanufacturing activity, the code assigned to an establishment could differ from that which would have been assigned on the basis of more complete product information. Therefore, the total establishment count for individual industries should be viewed as an approximation rather than a precise measurement. The counts for establishments with 20 employees or more are more reliable than the total number of establishments.

More detailed figures for this State will appear in the final census reports. Final reports will also include a comprehensive discussion of such concepts as "industry" and "establishment," as well as the various statistical items such as "employment," "value of shipments," and "value added." Similar preliminary and final reports will be issued for other States during the coming months. A series of preliminary summary reports showing U.S. totals for each manufacturing industry and for each State are being issued. Final industry reports and final area reports will be published during 1974.

Order forms describing the individual reports and listing their prices may be obtained from any U.S. Department of Commerce district office or from the Publications Distribution Section, Social and Economic Statistics Administration, Washington, D.C. 20233.

The 1972 Census of Manufactures is the 29th census of manufacturing establishments in the United States. For 1972, it was conducted jointly with the censuses of mineral industries, construction industries, retail trade, wholesale trade, and selected services under authority of Title 13 of the United States Code. Title 13 specifies that a census of manufactures be conducted every 5 years and, as amended, to cover years ending in "2" and "7". Title 13 also authorizes an annual sample survey of manufacturing establishments in interim years.



## Appendix B. EXPLANATION OF TERMS

*(For a more complete discussion of these terms and the method of compiling the Census of Manufactures, see the "Introduction" to the 1967 Census of Manufactures, Volume III).*

**All Employees**—All full-time and part-time employees on the payrolls of operating manufacturing establishments for any part of the pay period ending nearest the 12th of the months specified on the report form. Included are all persons on paid sick leave, paid holidays, and paid vacations during these pay periods. Officers of corporations are included as employees; proprietors and partners of unincorporated firms are excluded. The "all employee" number is the average number of production workers for the midmonth payroll period of March, May, August, and November plus the number of nonproduction employees in mid-March.

**Number of Production Workers**—Workers (up through the working foreman level) engaged in fabricating, processing, assembling, inspecting, receiving, packing, warehousing, shipping (but not delivering), and maintenance, repair, janitorial, and watchman services, product development, auxiliary production for plant's own use (e.g., powerplant), recordkeeping, and other closely associated services. Proprietors and partners are excluded.

**Payroll**—This item includes all forms of compensation such as salaries, wages, commissions, dismissal pay, bonuses, vacation and sick leave pay, and compensation in kind, prior to such deductions as employees' Social Security contributions, withholding taxes, group insurance, union dues, and savings bonds. The total includes salaries of officers of these establishments, if a corporation; it excludes payments to the proprietor or partners, if an unincorporated concern. Respondents were told that in reporting they could follow the definition of payrolls used for calculating the Federal withholding tax.

**Man-Hours of Production Workers**—This total relates to production-worker man-hours worked or paid for at the plant including actual overtime hours (not straight-time equivalent hours). It excludes hours paid for vacation, holidays, or sick leave when the employee was not at the plant.

**Cost of Materials**—The term "Cost of Materials" refers to charges actually paid or payable for items consumed or put into production during the year, including freight and other direct charges incurred by the establishment in acquiring these materials. It includes the cost of materials or fuel consumed regardless of

whether these items were purchased by the establishment from other companies, transferred to it from other establishments of the same company, or withdrawn from inventory during the year. The establishment was requested to value materials transferred from other parts of the company at its approximate market value, not at cost of production. The important components of this cost item are (a) all raw materials, semifinished goods, parts, components, containers, scrap, and supplies put into production or used as operating supplies and for repair and maintenance during the year; (b) electric energy purchased; (c) fuels consumed for heat, power, or the generation of electricity; (d) work done by others on materials or parts furnished by manufacturing establishments (contract work); and (e) products bought and resold in the same condition.

**Value of Shipments**—The value of shipments is the received or receivable net selling value, f.o.b. plant (exclusive of freight and taxes), of all products shipped, both primary and secondary, as well as all miscellaneous receipts such as receipts for contract work performed for others, installation and repair, sales of scrap, and sale of products bought and resold without further processing. Included are all items made by the establishment or for it under contract from materials owned by it whether sold, transferred to other plants of the same company, or shipped on consignment. The net selling value of products made in one plant on a contract basis from materials owned by another was reported by the plant providing the materials.

In the case of multiunit companies, the manufacturer was requested to report the value of products transferred to other establishments of the same company at full economic value; i.e., to include not only the direct costs of production but also a reasonable proportion of "all other costs" (including company overhead) and profit.

**Duplication in Cost of Materials and Value of Products**—The aggregate cost of materials and value-of-shipments figures for industry groups and for all manufacturing industries may include large amounts of duplication since the products of some industries are used as materials by others. With some important exceptions, such as motor vehicles and parts, this duplication is not significant within individual industries but arises from the addition of the totals of related industries in successive stages of the production of a finished manufactured product. Examples are the addition of flour mills to bakeries in the food group and the addition of pulp mills to paper mills in the paper and allied products group of industries. Esti-



mates of this duplication indicate that the value of manufactured products exclusive of such duplication—the value of finished manufactures—approximates two-thirds of the total value of products.

Prior to 1962, the Bureau of the Census did not publish figures for cost of materials or value of shipments if they contained significant duplication. Effective with the 1962 annual survey these figures were shown at all industry levels for the United States to meet the requests for their use in studies in which the presence of an indeterminate amount of duplication is not a limiting factor. However, they are appropriately footnoted. Effective with the 1964 annual survey, these industry group totals are also shown at the State, standard metropolitan statistical area, and large-county level.

Even where there is no significant amount of duplication, value-of-shipments figures are deficient as measures of the relative economic importance of individual manufacturing industries or geographic areas because of the wide variation in ratio of materials, labor, and other processing costs to value of shipments among industries.

**Value Added by Manufacture**—This measure of manufacturing activity is derived by subtracting the cost of materials, supplies, containers, fuel, purchased electricity, and cost of resales contract work from the value of shipments for products manufactured plus resales and receipts for services rendered. The result of this calculation is adjusted by the net change in finished goods and work-in-process inventories between the beginning and end of the year. (In the few industries that report value of production rather than value of shipments, only changes in work-in-process inventories are used to adjust value added. In the shipbuilding and repairing industry, no inventory adjustment is made.)

“Value added” avoids the duplication in the value of shipments figure which results from the use of products of some establishments as materials by others. Value added is considered to be the best value measure available for comparing the relative economic importance of manufacturing among industries and geographic areas.

**Expenditures for Plant and Equipment**—Manufacturing establishments in operation and establishments under construction but not yet in operation, were asked to report their expenditures for (a) permanent additions and major alterations to the manufacturing establishment, and (b) new machinery and equipment used for replacement purposes and additions to plant capacity if they are of the type for which depreciation accounts are ordinarily maintained.

These totals exclude expenditures for new facilities and equipment leased from nonmanufacturing concerns; new facilities owned by the Federal Government but operated under contract by private companies; and plant and equipment furnished to the manufacturer by communities and nonprofit organizations. Expenditures for used plant and equipment (although reported in the census), expenditures for land, and cost of maintenance and repairs charged as current operating expense are also omitted from the figures for new capital expenditures.

**Central Administrative Offices and Auxiliary Units**—In the 1972 census as in previous years, respondents were asked to file separate reports for central administrative offices or auxiliary units which were (1) at different locations from the establishments served or, (2) at the same location as one of these establishments but were not operated as an integral part thereof and served two or more establishments. The functions of employees in central administrative offices include general company policy determination, planning and management (that is, company purchasing, accounting, general engineering, direction of company personnel matters, and legal and patent matters). Auxiliaries are storage facilities, garages, repair shops, purchasing offices, sales promotion offices, and research laboratories serving the plants or central management of the company.

**Standard Metropolitan Statistical Areas**—Standard metropolitan statistical areas (SMSA) are integrated economic and social units with a large volume of daily travel and communication between the central city and outlying parts of the area.<sup>1</sup> Each area (except in New England) consists of one whole county or more. An area may contain not only highly industrialized counties but also adjoining counties which, though primarily residential in character, contribute significantly to the industrial counties' labor force and are socially and economically integrated with the central city. These areas are defined by the Federal Committee on Standard Metropolitan Statistical Areas of the Office of Management and Budget for general-purpose use throughout the Federal Government in presenting economic and social data. In the New England States, similar intergration criteria are applied in defining

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<sup>1</sup> Each standard metropolitan statistical area must include either (1) a city with 50,000 or more inhabitants, or (2) a city having a population of at least 25,000 which (a) with the addition of the population of contiguous places has a population density of at least 1,000 persons per square mile; (b) constitutes, for general economic and social purposes, a single community with a combined population of at least 50,000; and (c) includes a total population of at least 75,000 in the county or counties in which the city and contiguous places are located.

SMSA's on a city and town basis because towns rather than counties are regarded as the significant unit in this region of the country.

The requirement that each SMSA consist of county units (except in New England) sometimes results in the inclusion in an area of considerable amount of territory which would not ordinarily be considered "metropolitan," much less "industrial." It is recognized that metropolitan areas could be more accurately defined in terms of smaller area segments such as minor civil

divisions, but the usefulness of areas so defined would be limited by the fact that many types of economic and social data are available only on a county basis.

Each SMSA is designated by the name of the principal city of the area. In addition to the name of the principal city, the area title may include one or two additional city names.

The data for SMSA's which changed definition since the 1967 census have not been retabulated on the new basis for years prior to 1972.



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# 1972 CENSUS OF MANUFACTURES

## AREA SERIES

C72(P)-S9

U. S. DEPARTMENT OF COMMERCE • Social and Economic Statistics Administration • BUREAU OF THE CENSUS

Issued April 1974

## District of Columbia

Value added by manufacturing in 1972 in the District of Columbia amounted to \$368 million, a 3-percent decrease from 1971 and a 10-percent increase from 1967.

This report presents preliminary results from the 1972 Census of Manufactures for the District and the Standard Metropolitan Statistical Area.

Data are provided for industry groups within the District. Historical data, back to 1958, are included for the District as a whole, and 1967 figures on employment and

value added are provided for the Standard Metropolitan Statistical Area.

The figures in this report have been subjected to only preliminary review and must be regarded as approximations of the final census figures. No adjustments have been made in the value figures for changes in price level.

For an explanation of the terms used in the tables, see the appendix at the end of this report.

TABLE 1. General Statistics for the District of Columbia: 1972 and Earlier Years

(See appendix, Explanation of Terms)

Year	Establishments		All employees <sup>1</sup>		Production workers			Value added by manufacture	Cost of materials <sup>2</sup>	Value of shipments <sup>2</sup>	Capital expenditures, new
	Total	With 20 employees or more	Number	Payroll	Number	Man-hours	Wages				
	(number)	(number)	(1,000)	(million dollars)	(1,000)	(millions)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(million dollars)
DISTRICT OF COLUMBIA											
1972 Census .....	574	137	19.6	219.3	9.5	17.0	97.5	385.9	243.8	626.6	18.7
1971 ASM <sup>3</sup> .....	(NA)	(NA)	20.4	200.8	9.9	17.6	93.1	350.3	244.4	592.4	25.7
1970 ASM <sup>3</sup> .....	(NA)	(NA)	21.3	202.1	10.5	19.4	91.7	361.2	262.6	618.8	16.9
1969 ASM <sup>3</sup> .....	(NA)	(NA)	21.5	189.1	10.3	18.9	80.4	331.6	247.6	580.1	11.3
1968 ASM <sup>3</sup> .....	(NA)	(NA)	21.1	173.8	10.6	19.8	76.8	316.2	241.9	554.9	16.3
1967 Census .....	593	155	23.1	178.7	11.7	21.7	77.4	332.8	258.8	589.7	17.0
1966 ASM .....	(NA)	(NA)	24.0	176.9	12.2	22.6	79.0	302.9	267.2	567.2	10.9
1965 ASM .....	(NA)	(NA)	24.0	169.0	12.3	22.5	74.8	291.5	241.3	530.8	12.9
1964 ASM .....	(NA)	(NA)	24.0	169.8	10.8	20.8	67.7	273.5	225.2	497.0	10.2
1963 Census .....	617	167	22.1	147.6	11.3	21.3	64.7	256.8	(NA)	(NA)	13.0
1962 ASM .....	(NA)	(NA)	22.7	141.4	11.3	21.0	59.4	245.1	(NA)	(NA)	15.1
1961 ASM .....	(NA)	(NA)	23.1	138.7	11.7	22.6	59.6	243.8	(NA)	(NA)	15.8
1960 ASM .....	(NA)	(NA)	23.1	134.4	11.7	21.9	58.5	239.2	(NA)	(NA)	22.2
1959 ASM .....	(NA)	(NA)	22.5	126.3	11.8	22.6	56.6	229.1	(NA)	(NA)	21.1
1958 Census .....	561	142	21.3	114.0	11.2	21.3	52.8	198.1	(NA)	(NA)	14.7

Note: "ASM" data are based on a representative sample of manufacturing establishments canvassed in the Annual Survey of Manufactures. These estimates may differ from the results of a complete canvass of all manufacturing establishments. The standard errors associated with these estimates are published in the annual survey of manufactures volumes for this period.

(NA) Not available.

<sup>1</sup>Includes employment and payroll at central administrative offices and auxiliary units. (For a definition of these units, see appendix.)

<sup>2</sup>The total cost of materials and value of shipments may include extensive duplication arising from shipments between establishments in the same industry classification. (For a more complete explanation, see appendix.)

<sup>3</sup>Data for the 1968-1971 Annual Survey of Manufactures have been revised.

TABLE 2. General Statistics for the District of Columbia and Standard Metropolitan Statistical Area: 1972 and 1967

(See appendix, Explanation of Terms)

State, standard metropolitan statistical areas, and counties <sup>1</sup>	1972											1967	
	Establishments		All employees <sup>1</sup>		Production workers			Value added by manufacture	Cost of materials <sup>2</sup>	Value of shipments <sup>2</sup>	Capital expenditures, new	All employees	Value added by manufacture
	Total	With 20 employees or more	Number	Payroll	Number	Man-hours	Wages						
	(number)	(number)	(1,000)	(million dollars)	(1,000)	(million)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(1,000)	(million dollars)
DISTRICT OF COLUMBIA, TOTAL . . . . .	574	137	19.6	219.3	9.5	17.0	97.5	385.9	243.8	626.6	18.7	23.1	332.8
STANDARD METROPOLITAN STATISTICAL AREAS <sup>3</sup>													
WASHINGTON, DC-MD-VA . . . . .	1 721	475	54.8	586.1	29.0	54.6	259.6	1 022.3	820.9	1 831.6	59.1	55.9	732.8
PORTION IN MARYLAND . . . . .	716	213	22.0	230.8	12.3	23.9	104.5	381.8	378.0	746.7	16.0	19.4	257.9
PORTION IN DISTRICT OF COLUMBIA . . . . .	574	137	19.6	219.3	9.5	17.0	97.5	385.9	243.8	626.6	18.7	23.1	332.8
PORTION IN VIRGINIA . . . . .	431	125	13.2	136.0	7.2	13.7	57.6	254.6	199.1	458.3	24.4	13.4	142.1

<sup>1</sup>Includes employment and payroll at central administrative offices and auxiliary units. (For a definition of these units, see appendix.)<sup>2</sup>The total cost of materials and value of shipments may include extensive duplication arising from shipments between establishments in the same industry classification. (For a more complete explanation, see appendix.)<sup>3</sup>The standard metropolitan statistical area in the District of Columbia is defined as follows:

WASHINGTON, DC-MD-VA, SMSA: Consists of the District of Columbia; Charles, Montgomery, and Prince Georges Counties, MD; and Alexandria, Fairfax, and Falls Church cities and Arlington, Fairfax, Loudoun, and Prince William Counties, VA.

TABLE 3. General Statistics for the District of Columbia by Industry Groups and Industries: 1972 and 1967

(See appendix, Explanation of Terms)

Code	Industry	1972											1967	
		Establishments		All employees		Production workers			Value added by manufacture	Cost of materials <sup>1</sup>	Value of shipments <sup>1</sup>	Capital expenditures, new	All employees	Value added by manufacture
		Total	With 20 employees or more	Number	Payroll	Number	Man-hours	Wages						
		(number)	(number)	(1,000)	(million dollars)	(1,000)	(million)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(1,000)	(million dollars)
	ALL INDUSTRIES, TOTAL <sup>a</sup> . . . . .	574	137	19.6	219.3	9.5	17.0	97.5	385.9	243.8	626.6	18.7	23.1	332.8
20	FOOD AND KINDRED PRODUCTS . . . . .	22	11	1.5	14.2	.9	2.0	8.5	40.7	52.8	93.5	1.5	4.4	60.6
202	DAIRY PRODUCTS . . . . .	4	3	.3	3.1	.1	.3	1.5	9.4	22.9	32.3	.3	1.9	26.6
24	LUMBER AND WOOD PRODUCTS . . . . .	10	4	.3	1.9	.2	.4	1.3	2.7	3.5	6.3	.2	(NA)	(NA)
27	PRINTING AND PUBLISHING . . . . .	343	78	14.0	162.1	6.2	10.8	70.3	293.5	150.7	442.3	15.1	14.8	229.0
2721	PERIODICALS . . . . .	74	16	3.1	36.1	.1	.3	1.2	91.0	56.7	146.2	1.8	3.8	82.7
273	BOOKS . . . . .	35	11	.9	9.1	.7	1.3	6.4	16.3	8.1	24.1	1.2	1.3	15.2
2731	BOOK PUBLISHING . . . . .	22	3	.5	3.7	.3	.5	2.1	8.1	3.5	11.3	(D)	.5	5.9
2732	BOOK PRINTING . . . . .	13	8	.5	5.3	.4	.8	4.2	8.2	4.6	12.8	(D)	.8	9.4
2741	MISCELLANEOUS PUBLISHING . . . . .	31	5	.6	5.9	.2	.2	1.2	15.4	6.6	22.0	.2	.5	7.0
275	COMMERCIAL PRINTING . . . . .	134	27	2.8	9.1	1.9	3.6	20.5	52.9	28.8	81.5	2.6	(NA)	(NA)
2751	COMMERCIAL PRINTING, LETTERPRESS . . . . .	74	6	1.2	11.8	.9	1.6	8.9	25.4	8.6	34.0	.5	(NA)	(NA)
2752	COMMERCIAL PRINTING, LITHOGRAPHIC . . . . .	55	20	1.5	16.7	1.0	1.9	11.2	26.5	19.8	46.0	2.1	(NA)	(NA)
28	CHEMICALS AND ALLIED PRODUCTS . . . . .	8	2	.3	3.8	.2	.3	1.8	7.1	8.3	15.3	.2	AA	(D)
34	FABRICATED METAL PRODUCTS . . . . .	20	5	.5	5.6	.4	.8	4.3	8.4	4.0	12.2	.3	(NA)	(NA)
344	FABRICATED STRUCTURAL METAL PROD . . . . .	13	5	.4	5.2	.4	.7	4.0	7.9	3.7	11.4	.3	.5	8.1
36	ELECTRIC, ELECTRONIC EQUIPMENT . . . . .	10	3	.6	4.0	.3	.3	.9	9.2	1.9	10.6	.4	(NA)	(NA)
39	MISC. MANUFACTURING INDUSTRIES . . . . .	19	3	.3	1.9	.2	.3	1.3	3.2	1.4	4.6	(Z)	.2	2.4
--	ADMINISTRATIVE AND AUXILIARY . . . . .	73	15	.8	13.3	-	-	-	-	-	-	-	.7	-

Note: The following symbols indicate employment size range for 1967:

AA less than 250 employees      EE 1,000 to 2,499 employees  
BB 250 to 499 employees      FF 2,500 employees and over  
CC 500 to 999 employees

- Represents zero. (NA) Not available. Because of a revision to this industry or industry group in the 1972 edition of the SIC manual, 1967 census data are not available on a comparable basis. (Z) Less than half of the unit of measurement shown.

<sup>1</sup>The total cost of materials and value of shipments for industry groups shown may include extensive duplication arising from shipments between establishments in the same industry classification. (For a more complete explanation, see appendix.)<sup>2</sup>Includes figures for industry groups which have been withheld from publication in order to (a) avoid disclosing figures for individual companies or (b) permit further checking of figures for smaller industry groups. Additional detail will appear in the final report for this State.



## Appendix A. SCOPE AND COVERAGE

This report is one of a series presenting preliminary information, by State, from the 1972 Census of Manufactures. The data will be superseded in a final report which, in turn, will be included in *Volume III, Area Statistics, 1972 Census of Manufactures*. The final report will include a comprehensive discussion of the concepts and definitions used in the census.

The census of manufactures covers each manufacturing establishment in the United States with one paid employee or more; manufacturing establishments with no employees are excluded. Firms which operated more than one establishment were required to file a separate report for each location. Companies which engaged in distinctly different lines of activity at one location were asked to submit separate reports if the company records permitted such a separation and the activities were of significant size.

This report includes figures for administrative offices, warehouses, garages, or other auxiliary units which service manufacturing establishments.

In the 1972 census, the approximately 120,000 manufacturing establishments with fewer than 10 employees were excused from filing reports. Under special arrangements which safeguarded the confidentiality of both tax and census records, data on payrolls, sales, and industry classification from the administrative records of the Social Security Administration and the Internal Revenue Service were made available to the Census Bureau for use in the 1972 Economic Censuses (retail and wholesale trade, service industries, construction industries, manufactures, and mineral industries). Estimates for data other than payrolls and sales for these small establishments were constructed from industry averages. The effect on industry aggregates is slight in most industries. For manufacturing as a whole, these small establishments account for less than 3 percent of the payrolls and value added.

Establishments are classified by industry in accordance with industry definitions described in the 1972 edition of the Standard Industrial Classification (SIC) Manual. For 1972, the SIC was significantly revised and the comparability with prior year's data for some industries was significantly affected. The comparability at the 2- and 3-digit SIC levels was less affected. The final volumes of the 1972 Census of Manufactures will contain a table relating aggregates based on the 1972 SIC with aggregates derived from classifying establishments according to the 1967 SIC definitions.

As in earlier censuses, a number of small establishments may have been misclassified as to industry. However, such possible misclassifications have significant effect on *none* of the statistics except the number of establishments. As indicated above, report forms were not mailed to very small establishments (fewer than 10 employees). The industry classifications for these establishments were assigned on the basis of brief descriptions of the general activity of the establishment. Where the description is incomplete or there are relatively fine lines of demarcation among industries or between manufacturing and nonmanufacturing activity, the code assigned to an establishment could differ from that which would have been assigned on the basis of more complete product information. Therefore, the total establishment count for individual industries should be viewed as an approximation rather than a precise measurement. The counts for establishments with 20 employees or more are more reliable than the total number of establishments.

More detailed figures for this State will appear in the final census reports. Final reports will also include a comprehensive discussion of such concepts as "industry" and "establishment," as well as the various statistical items such as "employment," "value of shipments," and "value added." Similar preliminary and final reports will be issued for other States during the coming months. A series of preliminary summary reports showing U.S. totals for each manufacturing industry and for each State are being issued. Final industry reports and final area reports will be published during 1974.

Order forms describing the individual reports and listing their prices may be obtained from any U.S. Department of Commerce district office or from the Publications Distribution Section, Social and Economic Statistics Administration, Washington, D.C. 20233.

The 1972 Census of Manufactures is the 29th census of manufacturing establishments in the United States. For 1972, it was conducted jointly with the censuses of mineral industries, construction industries, retail trade, wholesale trade, and selected services under authority of Title 13 of the United States Code. Title 13 specifies that a census of manufactures be conducted every 5 years and, as amended, to cover years ending in "2" and "7". Title 13 also authorizes an annual sample survey of manufacturing establishments in interim years.



## Appendix B. EXPLANATION OF TERMS

*(For a more complete discussion of these terms and the method of compiling the Census of Manufactures, see the "Introduction" to the 1967 Census of Manufactures, Volume III).*

**All Employees**—All full-time and part-time employees on the payrolls of operating manufacturing establishments for any part of the pay period ending nearest the 12th of the months specified on the report form. Included are all persons on paid sick leave, paid holidays, and paid vacations during these pay periods. Officers of corporations are included as employees; proprietors and partners of unincorporated firms are excluded. The "all employee" number is the average number of production workers for the midmonth payroll period of March, May, August, and November plus the number of nonproduction employees in mid-March.

**Number of Production Workers**—Workers (up through the working foreman level) engaged in fabricating, processing, assembling, inspecting, receiving, packing, warehousing, shipping (but not delivering), and maintenance, repair, janitorial, and watchman services, product development, auxiliary production for plant's own use (e.g., powerplant), recordkeeping, and other closely associated services. Proprietors and partners are excluded.

**Payroll**—This item includes all forms of compensation such as salaries, wages, commissions, dismissal pay, bonuses, vacation and sick leave pay, and compensation in kind, prior to such deductions as employees' Social Security contributions, withholding taxes, group insurance, union dues, and savings bonds. The total includes salaries of officers of these establishments, if a corporation; it excludes payments to the proprietor or partners, if an unincorporated concern. Respondents were told that in reporting they could follow the definition of payrolls used for calculating the Federal withholding tax.

**Man-Hours of Production Workers**—This total relates to production-worker man-hours worked or paid for at the plant including actual overtime hours (not straight-time equivalent hours). It excludes hours paid for vacation, holidays, or sick leave when the employee was not at the plant.

**Cost of Materials**—The term "Cost of Materials" refers to charges actually paid or payable for items consumed or put into production during the year, including freight and other direct charges incurred by the establishment in acquiring these materials. It includes the cost of materials or fuel consumed regardless of

whether these items were purchased by the establishment from other companies, transferred to it from other establishments of the same company, or withdrawn from inventory during the year. The establishment was requested to value materials transferred from other parts of the company at its approximate market value, not at cost of production. The important components of this cost item are (a) all raw materials, semifinished goods, parts, components, containers, scrap, and supplies put into production or used as operating supplies and for repair and maintenance during the year; (b) electric energy purchased; (c) fuels consumed for heat, power, or the generation of electricity; (d) work done by others on materials or parts furnished by manufacturing establishments (contract work); and (e) products bought and resold in the same condition.

**Value of Shipments**—The value of shipments is the received or receivable net selling value, f.o.b. plant (exclusive of freight and taxes), of all products shipped, both primary and secondary, as well as all miscellaneous receipts such as receipts for contract work performed for others, installation and repair, sales of scrap, and sale of products bought and resold without further processing. Included are all items made by the establishment or for it under contract from materials owned by it whether sold, transferred to other plants of the same company, or shipped on consignment. The net selling value of products made in one plant on a contract basis from materials owned by another was reported by the plant providing the materials.

In the case of multiunit companies, the manufacturer was requested to report the value of products transferred to other establishments of the same company at full economic value; i.e., to include not only the direct costs of production but also a reasonable proportion of "all other costs" (including company overhead) and profit.

**Duplication in Cost of Materials and Value of Products**—The aggregate cost of materials and value-of-shipments figures for industry groups and for all manufacturing industries may include large amounts of duplication since the products of some industries are used as materials by others. With some important exceptions, such as motor vehicles and parts, this duplication is not significant within individual industries but arises from the addition of the totals of related industries in successive stages of the production of a finished manufactured product. Examples are the addition of flour mills to bakeries in the food group and the addition of pulp mills to paper mills in the paper and allied products group of industries. Esti-



mates of this duplication indicate that the value of manufactured products exclusive of such duplication—the value of finished manufactures—approximates two-thirds of the total value of products.

Prior to 1962, the Bureau of the Census did not publish figures for cost of materials or value of shipments if they contained significant duplication. Effective with the 1962 annual survey these figures were shown at all industry levels for the United States to meet the requests for their use in studies in which the presence of an indeterminate amount of duplication is not a limiting factor. However, they are appropriately footnoted. Effective with the 1964 annual survey, these industry group totals are also shown at the State, standard metropolitan statistical area, and large-county level.

Even where there is no significant amount of duplication, value-of-shipments figures are deficient as measures of the relative economic importance of individual manufacturing industries or geographic areas because of the wide variation in ratio of materials, labor, and other processing costs to value of shipments among industries.

**Value Added by Manufacture**—This measure of manufacturing activity is derived by subtracting the cost of materials, supplies, containers, fuel, purchased electricity, and cost of resales contract work from the value of shipments for products manufactured plus resales and receipts for services rendered. The result of this calculation is adjusted by the net change in finished goods and work-in-process inventories between the beginning and end of the year. (In the few industries that report value of production rather than value of shipments, only changes in work-in-process inventories are used to adjust value added. In the shipbuilding and repairing industry, no inventory adjustment is made.)

"Value added" avoids the duplication in the value of shipments figure which results from the use of products of some establishments as materials by others. Value added is considered to be the best value measure available for comparing the relative economic importance of manufacturing among industries and geographic areas.

**Expenditures for Plant and Equipment**—Manufacturing establishments in operation and establishments under construction but not yet in operation, were asked to report their expenditures for (a) permanent additions and major alterations to the manufacturing establishment, and (b) new machinery and equipment used for replacement purposes and additions to plant capacity if they are of the type for which depreciation accounts are ordinarily maintained.

These totals exclude expenditures for new facilities and equipment leased from nonmanufacturing concerns; new facilities owned by the Federal Government but operated under contract by private companies; and plant and equipment furnished to the manufacturer by communities and nonprofit organizations. Expenditures for used plant and equipment (although reported in the census), expenditures for land, and cost of maintenance and repairs charged as current operating expense are also omitted from the figures for new capital expenditures.

**Central Administrative Offices and Auxiliary Units**—In the 1972 census as in previous years, respondents were asked to file separate reports for central administrative offices or auxiliary units which were (1) at different locations from the establishments served or, (2) at the same location as one of these establishments but were not operated as an integral part thereof and served two or more establishments. The functions of employees in central administrative offices include general company policy determination, planning and management (that is, company purchasing, accounting, general engineering, direction of company personnel matters, and legal and patent matters). Auxiliaries are storage facilities, garages, repair shops, purchasing offices, sales promotion offices, and research laboratories serving the plants or central management of the company.

**Standard Metropolitan Statistical Areas**—Standard metropolitan statistical areas (SMSA) are integrated economic and social units with a large volume of daily travel and communication between the central city and outlying parts of the area.<sup>1</sup> Each area (except in New England) consists of one whole county or more. An area may contain not only highly industrialized counties but also adjoining counties which, though primarily residential in character, contribute significantly to the industrial counties' labor force and are socially and economically integrated with the central city. These areas are defined by the Federal Committee on Standard Metropolitan Statistical Areas of the Office of Management and Budget for general-purpose use throughout the Federal Government in presenting economic and social data. In the New England States, similar intergration criteria are applied in defining

<sup>1</sup> Each standard metropolitan statistical area must include either (1) a city with 50,000 or more inhabitants, or (2) a city having a population of at least 25,000 which (a) with the addition of the population of contiguous places has a population density of at least 1,000 persons per square mile; (b) constitutes, for general economic and social purposes, a single community with a combined population of at least 50,000; and (c) includes a total population of at least 75,000 in the county or counties in which the city and contiguous places are located.

SMSA's on a city and town basis because towns rather than counties are regarded as the significant unit in this region of the country.

The requirement that each SMSA consist of county units (except in New England) sometimes results in the inclusion in an area of considerable amount of territory which would not ordinarily be considered "metropolitan," much less "industrial." It is recognized that metropolitan areas could be more accurately defined in terms of smaller area segments such as minor civil

divisions, but the usefulness of areas so defined would be limited by the fact that many types of economic and social data are available only on a county basis.

Each SMSA is designated by the name of the principal city of the area. In addition to the name of the principal city, the area title may include one or two additional city names.

The data for SMSA's which changed definition since the 1967 census have not been retabulated on the new basis for years prior to 1972.



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## PRELIMINARY REPORT

**1972 CENSUS OF  
MANUFACTURES**

## AREA SERIES

72(P)-S10

ued March 1974

U. S. DEPARTMENT OF COMMERCE • Social and Economic Statistics Administration • BUREAU OF THE CENSUS

**Florida**

Value added by manufacturing in 1972 in the State of Florida amounted to \$5,477 million, a 14-percent increase from 1971 and a 49-percent increase from 1967.

This report presents preliminary results from the 1972 Census of Manufactures for the State, its Standard Metropolitan Statistical Areas, and its counties.

Data are provided for industry groups within the State. Historical data, back to 1958, are included for the State as a whole,

and 1967 figures on employment and value added are provided for the smaller areas.

The figures in this report have been subjected to only preliminary review and must be regarded as approximations of the final census figures. No adjustments have been made in the value figures for changes in price level.

For an explanation of the terms used in the tables, see the appendix at the end of this report.

**TABLE 1. General Statistics for the State: 1972 and Earlier Years**

(See appendix, Explanation of Terms)

Year	Establishments		All employees <sup>1</sup>		Production workers			Value added by manufacture	Cost of materials <sup>2</sup>	Value of shipments <sup>2</sup>	Capital expenditures, new
	Total	With 20 employees or more	Number	Payroll	Number	Man-hours	Wages				
	(number)	(number)	(1,000)	(million dollars)	(1,000)	(millions)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(million dollars)
FLORIDA											
1972 Census .....	10,168	2,815	327.5	2,551.9	235.6	469.5	1,531.9	5,477.3	6,119.5	11,470.3	449.0
1971 ASM .....	(NA)	(NA)	308.5	2,282.2	211.6	422.0	1,296.4	4,821.8	5,172.1	10,004.7	417.0
1970 ASM .....	(NA)	(NA)	310.0	2,192.2	210.1	426.3	1,211.8	4,560.1	4,938.0	9,522.8	377.8
1969 ASM .....	(NA)	(NA)	313.5	2,129.1	217.0	436.8	1,184.6	4,398.5	4,630.6	8,927.9	312.9
1968 ASM .....	(NA)	(NA)	294.8	1,911.3	203.5	413.5	1,068.7	4,046.4	4,152.5	8,153.7	283.1
1967 Census .....	7,950	2,186	285.1	1,754.7	197.3	399.8	990.0	3,682.7	3,704.1	7,322.9	300.7
1966 ASM .....	(NA)	(NA)	249.3	1,444.0	171.7	353.2	810.7	2,938.4	3,263.6	6,154.7	306.8
1965 ASM .....	(NA)	(NA)	232.4	1,268.0	159.4	328.1	716.4	2,688.5	2,957.6	5,607.1	297.7
1964 ASM .....	(NA)	(NA)	221.6	1,160.3	150.8	310.4	650.3	2,486.7	2,844.9	5,301.1	166.8
1963 Census .....	7,377	1,826	215.4	1,102.3	148.4	301.3	626.2	2,352.0	(NA)	(NA)	190.6
1962 ASM .....	(NA)	(NA)	199.4	969.3	135.8	280.3	547.8	2,092.4	(NA)	(NA)	191.6
1961 ASM .....	(NA)	(NA)	192.5	896.0	133.4	272.3	510.4	1,884.2	(NA)	(NA)	225.4
1960 ASM .....	(NA)	(NA)	191.5	844.9	134.8	272.8	499.0	1,794.6	(NA)	(NA)	153.3
1959 ASM .....	(NA)	(NA)	185.6	781.5	135.3	278.4	486.2	1,677.3	(NA)	(NA)	156.3
1958 Census .....	5,349	1,526	171.3	680.5	125.1	247.8	434.5	1,410.8	(NA)	(NA)	152.3

Note: "ASM" data are based on a representative sample of manufacturing establishments canvassed in the Annual Survey of Manufactures. These estimates may differ from the results of a complete canvass of all manufacturing establishments. The standard errors associated with these estimates are published in the annual survey of manufactures volumes for this period. For comparative purposes, the 1972 ASM estimate for the State of Florida was 324 thousand employees, and \$5,550 million in value added with corresponding standard error of estimate of 2 and 2.

(NA) Not available.

<sup>1</sup>Includes employment and payroll at central administrative offices and auxiliary units. (For a definition of these units, see appendix.)

<sup>2</sup>The total cost of materials and value of shipments may include extensive duplication arising from shipments between establishments in the same industry classification. (For a more complete explanation, see appendix.)

TABLE 2. General Statistics for the State, Standard Metropolitan Statistical Areas, and Counties: 1972 and 1967

(See appendix, Explanation of Terms)

State, standard metropolitan statistical areas, and counties <sup>1</sup>	1972										1967		
	Establishments		All employees <sup>2</sup>		Production workers			Value added by manufac- ture	Cost of materials <sup>3</sup>	Value of shipments <sup>3</sup>	Capital expendi- tures, 1967	All employees	Value added by manufac- ture
	Total	With 20 employees or more	Number	Payroll	Number	Man-hours	Wages						
	(number)	(number)	(1,000)	(million dollars)	(1,000)	(million)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(1,000)	(million dollars)
FLORIDA, TOTAL . . . . .	10 168	2 915	327.5	2 551.9	235.6	469.5	1 531.9	5 477.3	6 119.5	11 470.3	449.6	285.1	3 682.7
STANDARD METROPOLITAN STATISTICAL AREAS <sup>4</sup>													
DAYTONA BEACH . . . . .	215	46	5.6	42.7	3.1	6.0	17.8	72.5	69.3	141.5	8.1	5.5	70.2
FORT LAUDERDALE-HOLLYWOOD . . . . .	1 087	234	23.8	186.6	16.5	32.5	109.7	377.7	258.5	631.8	30.6	15.8	196.2
FORT MYERS . . . . .	131	30	2.3	15.4	1.7	3.3	8.6	33.4	32.3	65.2	3.5	1.4	11.7
GAINESVILLE . . . . .	100	35	3.8	26.9	2.8	5.6	16.7	53.4	68.2	120.7	3.9	3.6	34.4
JACKSONVILLE . . . . .	752	240	29.0	241.2	21.4	44.3	159.7	616.1	782.4	1 394.7	55.3	28.0	400.2
LAKELAND-WINTER HAVEN . . . . .	305	114	14.5	114.2	11.1	24.5	79.3	313.8	584.7	997.6	36.1	15.7	276.0
MELBOURNE-TITUSVILLE-COCOA . . . . .	203	46	11.6	136.8	9.2	10.3	46.1	213.6	75.7	238.1	13.0	18.7	310.7
MIAMI . . . . .	2 349	911	86.9	615.6	66.0	127.6	374.1	1 241.4	1 135.2	2 331.9	79.3	58.5	599.4
ORLANDO . . . . .	608	182	19.3	141.1	13.3	27.4	83.9	326.4	451.0	765.6	28.1	22.4	273.4
PENSACOLA . . . . .	177	43	13.9	12.4	9.9	19.9	90.9	290.9	202.3	73.2	21.7	13.2	223.3
SARASOTA . . . . .	253	50	4.5	32.5	3.0	5.6	13.1	60.8	43.3	104.1	4.4	2.7	29.1
TALLAHASSEE . . . . .	97	20	2.2	16.2	1.6	3.1	10.1	29.9	33.0	62.6	2.1	1.6	14.2
TAMPA-ST. PETERSBURG . . . . .	1 440	442	59.4	466.0	42.2	84.4	279.0	951.1	1 120.0	2 057.6	75.5	48.1	581.3
WEST PALM BEACH-BOCA RATON . . . . .	420	100	12.1	113.6	7.0	14.3	50.1	207.9	275.7	483.0	20.6	15.4	236.3
COUNTIES													
ALACHUA . . . . .	100	35	3.8	26.9	2.8	5.6	16.7	53.4	68.2	120.7	3.9	3.6	34.4
BAY . . . . .	94	20	2.6	25.0	2.0	4.1	16.6	49.3	62.2	112.0	8.0	2.3	37.0
BRADFORD . . . . .	19	6	.4	2.3	.4	.8	1.8	3.3	2.4	5.7	.4	.5	3.0
BREVARD . . . . .	203	46	11.6	136.8	9.2	10.3	46.1	213.6	75.7	238.1	13.0	18.7	310.7
BROWARD . . . . .	1 087	234	23.8	186.6	16.5	32.5	109.7	377.7	258.5	631.8	30.6	15.8	196.2
CALHOUN . . . . .	39	6	.5	2.9	.7	.7	2.2	6.1	7.7	13.7	.7	.2	1.5
COLLIER . . . . .	50	8	.5	3.2	.3	.5	1.8	5.2	3.8	9.0	.6	.3	2.1
COLUMBIA . . . . .	52	10	.9	6.1	.8	1.4	4.5	13.1	18.3	31.1	.8	1.3	12.4
DADE . . . . .	2 349	911	86.9	615.6	66.0	127.6	374.1	1 241.4	1 135.2	2 331.9	79.3	58.5	599.4
DIXIE . . . . .	36	5	.6	3.7	.6	1.2	3.0	9.8	10.5	20.5	.5	.4	2.6
DUVAL . . . . .	596	216	24.5	202.9	17.8	36.9	132.0	503.3	657.3	1 157.6	42.0	23.1	331.2
ESCAMBIA . . . . .	154	44	12.5	114.4	8.7	17.6	73.1	258.8	178.1	442.3	17.8	(D)	(D)
GADSDEN . . . . .	44	12	1.2	6.4	1.1	1.9	4.5	14.5	39.8	54.0	1.3	1.6	10.0
GULF . . . . .	19	4	1.0	9.5	.8	1.6	7.2	16.8	29.7	46.1	(D)	(D)	(D)
HARDEE . . . . .	14	4	.4	1.7	.3	.6	1.2	4.1	8.2	12.3	1.4	.3	3.3
HIGHLANDS . . . . .	36	8	.6	3.5	.5	.9	2.6	8.7	13.2	21.5	.6	.3	4.2
HILLSBOROUGH . . . . .	687	259	33.8	257.5	25.0	49.1	164.0	588.3	791.2	1 377.2	43.5	28.3	367.9
HOLMES . . . . .	30	3	.4	1.8	.3	.7	1.3	3.1	3.0	6.1	.3	.1	.9
INDIAN RIVER . . . . .	38	8	2.3	18.2	1.8	3.6	12.5	33.8	29.7	61.9	2.0	2.5	25.5
JACKSON . . . . .	51	16	1.6	7.6	1.4	2.7	5.7	18.1	22.6	39.6	1.1	1.4	16.7
LAKE . . . . .	100	25	2.3	15.0	1.9	4.0	11.1	61.3	99.8	160.3	4.2	1.8	21.7
LEE . . . . .	131	30	2.3	15.4	1.7	3.3	8.6	33.4	32.3	65.2	3.5	1.4	11.7
LEVY . . . . .	22	3	.4	2.5	.4	.7	2.0	8.0	8.0	15.9	.7	.5	3.3
LIBERTY . . . . .	23	3	.3	1.5	.2	.4	1.3	2.7	3.7	6.4	.3	.2	2.3
MADISON . . . . .	41	7	.8	5.0	.7	1.6	3.8	16.1	22.0	36.6	.6	.6	6.7
MANATEE . . . . .	109	26	3.8	27.2	2.9	6.1	19.3	74.5	128.7	195.3	11.1	3.3	42.9
MARION . . . . .	117	37	3.7	26.5	2.9	5.7	18.1	60.5	116.9	175.7	5.3	2.3	25.0
MARTIN . . . . .	46	11	1.1	10.1	.8	1.5	6.2	31.8	19.5	42.2	1.0	.4	3.9
MONROE . . . . .	50	3	.3	1.9	.2	.4	1.1	5.7	7.0	12.7	.2	.4	4.9
NASSAU . . . . .	62	9	2.6	25.1	2.1	4.3	19.0	74.9	92.2	167.0	9.9	2.4	41.5
OKALOOSA . . . . .	55	12	1.3	9.5	1.0	2.0	6.5	18.4	14.7	32.4	2.0	2.5	19.1
ORANGE . . . . .	468	137	14.6	110.0	9.9	20.5	64.8	249.9	359.3	601.0	23.4	19.9	252.7
OSCEOLA . . . . .	35	13	.9	5.0	.7	1.1	3.1	12.5	12.7	20.5	.8	.7	8.1
PALM BEACH . . . . .	420	100	12.1	113.6	7.0	14.3	50.1	207.9	275.7	483.0	20.6	15.4	236.3
PASCO . . . . .	65	9	1.9	14.5	1.4	3.6	10.3	36.1	67.2	103.1	4.4	1.4	22.4
PINELLAS . . . . .	633	174	23.7	194.0	15.6	31.7	104.7	331.7	261.6	580.7	27.6	18.4	191.5
POLK . . . . .	305	114	14.5	114.2	11.1	24.5	79.3	313.8	584.7	897.6	36.1	15.7	276.0
PUTNAM . . . . .	62	10	3.7	30.7	3.2	7.1	21.2	83.4	15.1	15.1	2.1	(D)	(D)
ST. JOHNS . . . . .	39	8	1.2	8.4	1.0	2.0	5.6	22.6	13.5	35.9	.7	1.5	16.9
ST. LUCIE . . . . .	50	14	1.3	10.3	.8	1.7	4.7	20.5	41.5	61.9	(D)	.9	13.3
SANTA ROSA . . . . .	23	4	1.4	10.0	1.2	2.3	7.8	32.1	24.2	55.9	3.9	(D)	(D)
SARASOTA . . . . .	233	60	4.5	32.5	3.0	5.6	18.1	60.8	48.3	104.1	4.4	2.7	28.1
SEMINOLE . . . . .	105	32	3.8	25.7	2.7	5.5	15.4	64.0	79.0	140.1	3.9	1.8	17.6
SUMTER . . . . .	17	5	.5	3.3	.5	.9	2.5	7.0	19.3	25.7	.4	.2	2.2
SUWANNEE . . . . .	30	6	1.1	5.6	1.0	1.9	4.4	20.2	7.2	27.3	1.4	.6	5.3
TAYLOR . . . . .	38	9	2.0	17.0	1.7	3.5	12.7	39.3	51.5	91.6	4.7	1.8	28.3
VOLUSIA . . . . .	215	46	5.6	42.7	3.1	6.0	17.8	72.5	69.3	141.5	8.1	5.5	70.2
WALTON . . . . .	19	4	.4	2.2	.4	.8	1.7	4.7	11.0	15.8	.3	.3	2.6

(D) withheld to avoid disclosing figures for individual companies.

<sup>1</sup> Some counties were withheld from publication in order to (a) avoid disclosing figures for individual companies or (b) permit further checking of the figures for smaller counties. Additional detail will appear in the final report for this State.<sup>2</sup> Includes employment and payroll at central administrative offices and auxiliary units. (For a definition of these units, see appendix.)<sup>3</sup> The total cost of materials and value of shipments may include extensive duplication arising from shipments between establishments in the same industry classification. (For a more complete explanation, see appendix.)<sup>4</sup> The standard metropolitan statistical areas in this State are defined as follows:

DAYTONA BEACH SMSA: Coextensive with Volusia County, FL.

FORT LAUDERDALE-HOLLYWOOD SMSA: Coextensive with Broward County, FL.

FORT MYERS SMSA: Coextensive with Lee County, FL.

GAINESVILLE SMSA: Coextensive with Alachua County, FL.

JACKSONVILLE SMSA: Consists of Baker, Clay, Duval, Nassau, and St. Johns Counties, FL.

LAKELAND-WINTER HAVEN SMSA: Coextensive with Polk County, FL.

MELBOURNE-TITUSVILLE-COCOA SMSA: Coextensive with Brevard County, FL.

MIAMI SMSA: Coextensive with Dade County, FL.

ORLANDO SMSA: Consists of Orange, Osceola, and Seminole Counties, FL.

PENSACOLA SMSA: Consists of Escambia and Santa Rosa Counties, FL.

SARASOTA SMSA: Coextensive with Sarasota County, FL.

TALLAHASSEE SMSA: Consists of Leon and Wakulla Counties, FL.

TAMPA-ST. PETERSBURG SMSA: Consists of Hillsborough, Pasco, and Pinellas Counties, FL.

WEST PALM BEACH-BOCA RATON SMSA: Coextensive with Palm Beach County, FL.



TABLE 3. General Statistics for the State, by Industry Groups and Industries: 1972 and 1967

(See appendix, Explanation of Terms)

Code	Industry	1972										1967		
		Establishments		All employees		Production workers			Value added by manufacture	Cost of materials <sup>1</sup>	Value of shipments <sup>1</sup>	Capital expenditures, new	All employees	Value added by manufacture
		Total	With 20 employees or more	Number	Payroll	Number	Man hours	Wages						
		(number)	(number)	(1,000)	(million dollars)	(1 000)	(million)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(1,000)	(million dollars)
	ALL INDUSTRIES, TOTAL <sup>2</sup>												285.1	3 682.7
20	FOOD AND KINDRED PRODUCTS												44.3	627.2
201	MEAT PRODUCTS	44	35	5.1	35.0	3.9	8.4	24.2	81.1	331.4	407.1	4.5	4.9	50.0
2011	MEATPACKING PLANTS	38	15	1.7	13.8	1.2	2.8	8.2	28.8	176.1	202.6	1.9	1.7	21.7
2013	SAUSAGES AND OTHER PREPARED MEATS	39	15	1.9	13.7	1.4	2.9	9.6	30.0	129.6	156.5	1.9	1.7	16.3
202	DAIRY PRODUCTS	74	45	4.8	40.4	2.0	4.5	15.3	109.0	248.5	357.3	6.7	5.5	88.6
2024	ICE CREAM AND FROZEN DESSERTS	22	7	.6	4.8	.4	.8	2.5	14.4	20.9	35.2	1.2	.7	8.7
2026	FLUID MILK	47	33	4.1	35.4	1.6	3.7	12.7	94.1	225.4	319.3	5.5	4.7	79.3
203	PRESERVED FRUITS AND VEGETABLES			12.3			23.6		216.8					
2033	CANNED FRUITS AND VEGETABLES						3.7		136.0			10.9	7.7	88.8
2038	FOOD SPECIALTIES	18	6	.6	5.1	.5	1.0	3.6	14.6	38.5	53.1	1.7	(NA)	(NA)
204	GRAIN MILL PRODUCTS	60	18	1.3	8.3	.7	1.5	4.4	20.1	87.8	107.8	1.3	.9	13.4
205	BAKERY PRODUCTS	110	41	6.2	48.2	3.6	7.4	25.1	95.7	79.7	175.5	6.7	5.9	65.1
206	SUGAR AND CONFECTIONERY PRODUCTS	32	15	2.2	21.7	1.6	3.9	16.3	66.1	119.3	179.1	9.9	(NA)	(NA)
2061	RAW CANE SUGAR	9	7	1.4	14.9	1.0	2.6	12.0	44.5	69.0	111.3	8.1	EE	(D)
2062	CANE SUGAR REFINING	3	3	.3	4.6	.3	.7	2.9	14.9	44.6	55.0	1.5	AA	(D)
2065	CONFECTIONERY PRODUCTS	20	5	.5	2.3	.3	.6	1.4	6.7	5.8	12.8	.3	.4	4.2
207	FATS AND OILS	15	8	.3	3.4	.2	.6	1.8	14.3	15.0	28.4	2.1	(NA)	
2077	ANIMAL AND MARINE FATS AND OILS	9	7	.3	3.0	.2	.4	1.5	11.2	6.5	17.6	1.9	.3	5.0
208	BEVERAGES	105	62	5.6	50.5	2.7	5.6	22.2	156.6	240.4	394.5	9.3	5.7	93.6
2086	BOTTLED AND CANNED SOFT DRINKS	82	51	4.1	32.0	1.5	3.2	9.2	76.1	122.5	198.5	6.1	4.8	62.3
2087	FLAVORING EXTRACTS AND SIRUPS, NEC	11	3	.3	2.2	.2	.6	1.6	17.8	18.1	35.2	.3		(NA)
209	MISC. FOODS AND KINDRED PRODUCTS	197	52	6.5	39.4	5.3	10.4	26.1	153.6	297.0	451.4	8.4	(NA)	(NA)
2092	FRESH OR FROZEN PACKAGED FISH	41	20	3.7	18.5	3.3	6.5	12.7	35.8	106.1	141.7	1.3	2.7	13.6
2095	ROASTED COFFEE	21	7	1.0	9.8	.7	1.4	6.4	80.9	155.0	237.0	3.7	CC	(D)
2097	MANUFACTURED ICE	61	6	.5	2.7	.3	.8	1.8	7.0	1.4	8.4	.8	.7	6.4
2099	FOOD PREPARATIONS, NEC	61	17	1.2	7.7	.9	1.5	4.8	27.6	32.1	59.9	2.4	1.0	9.9
21	TOBACCO PRODUCTS	59	20	4.6	21.9	4.2	7.7	17.1	51.5	46.6	98.3	3.5	5.6	44.0
2121	CIGARS	54	17	4.2	21.0	3.8	7.3	16.3	48.5	44.0	92.7	(D)	FF	(D)
22	TEXTILE MILL PRODUCTS	63	29	4.2	28.0	3.7	7.4	20.7	55.6	61.1	114.5	9.7	2.0	12.5
225	KNITTING MILLS	38	18	3.5	23.2	3.1	6.2	17.3	44.3	49.4	92.3	8.4	1.4	9.0
2251	WOMEN'S HOSIERY, EXCEPT SOCKS	5	4	.8	4.1	.7	1.4	3.3	7.6	6.4	12.7	.7	(NA)	(NA)
23	APPAREL, OTHER TEXTILE PRODUCTS	859	352	27.9	129.7	25.3	44.6	102.4	229.4	163.6	389.7	6.6	16.6	105.4
232	MEN'S AND BOYS' FURNISHINGS	63	41	3.3	15.2	2.9	5.5	11.9	28.0	26.8	54.3	.9	2.4	13.3
2321	MEN'S AND BOYS' SHIRTS AND NIGHTWEAR	21	19	1.3	6.1	1.2	2.3	5.0	11.9	12.2	23.9	.5	.7	3.7
2329	MEN'S AND BOYS' CLOTHING, NEC	17	9	.6	2.6	.5	.9	2.2	4.3	6.5	10.8	.2	AA	(D)
233	WOMEN'S, AND MISSES' OUTERWEAR	458	211	15.2	70.6	13.8	24.5	56.2	123.4	70.4	193.4	2.9	7.4	48.5
2335	WOMEN'S AND MISSES' DRESSES	340	133	9.6	44.5	8.7	15.1	34.8	76.0	47.1	122.8	2.2	4.5	30.0
2337	WOMEN'S AND MISSES' SUITS AND COATS	29	22	1.7	8.2	1.5	2.7	7.1	11.6	3.4	15.1	.1	.3	2.3
234	WOMEN'S, CHILDREN'S UNDERGARMENTS	15	11	1.7	6.2	1.7	2.9	5.6	14.3	5.2	19.5	.2	1.0	8.1
2341	WOMEN'S AND CHILDREN'S UNDERWEAR	9	6	1.3	4.6	1.2	2.1	4.2	9.8	3.2	12.9	.2	(D)	(D)
2342	BRASSIERES AND ALLIED GARMENTS	6	5	.4	1.6	.4	.8	1.3	4.5	2.0	6.6	(Z)	CC	(D)
235	HATS, CAPS, AND MILLINERY	8	6	.3	1.4	.3	.5	1.0	2.3	1.7	4.0	(Z)	AA	(D)
236	CHILDREN'S OUTERWEAR	36	28	3.0	14.6	2.8	4.9	11.7	27.5	29.3	54.8	1.3	1.5	9.3
2369	CHILDREN'S OUTERWEAR, NEC	17	15	1.7	8.0	1.6	2.9	6.3	13.8	15.0	28.1	.8	CC	(D)
238	MISC. APPAREL AND ACCESSORIES	15	8	.5	2.3	.5	.7	1.7	3.9	3.4	7.2	.1	BB	(D)
2387	APPAREL BELTS	5	3	.3	1.1	.2	.3	.8	2.1	1.7	3.7	(D)	(NA)	(NA)
239	MISC. FABRICATED TEXTILE PRODUCTS	259	42	3.0	15.0	2.6	4.3	11.0	23.6	23.7	47.0	.9	3.0	19.3
2392	HOUSE FURNISHINGS, NEC	27	8	.3	1.6	.3	.5	1.2	2.5	3.7	6.1	.1	.5	3.0
2394	CANVAS AND RELATED PRODUCTS	51	7	.5	2.7	.4	.7	1.8	4.3	3.7	8.0	.2	.6	5.7
24	LUMBER AND WOOD PRODUCTS	1 255	225	19.6	128.6	16.7	32.2	97.0	257.4	358.7	610.7	20.8	(NA)	(NA)
2411	LOGGING CAMPS, LOGGING CONTRACTORS	611	14	2.7	14.1	2.3	4.1	11.1	30.4	35.5	66.0	5.9	2.8	23.5
242	SAWMILLS AND PLANING MILLS	108	29	2.5	14.9	2.2	4.7	12.2	35.8	44.5	80.7	2.6	2.6	19.4
2426	HARDWOOD DIMENSION AND FLOORING	11	3	.3	1.6	.3	.6	1.4	3.1	2.1	5.2	.1	(NA)	(NA)
243	MILLWORK, PLYWOOD, STRUC. MEMBERS	358	105	7.2	49.4	5.8	10.9	34.6	89.8	105.6	191.2	5.0	(NA)	(NA)
2431	MILLWORK	145	37	2.5	16.9	2.0	3.5	11.7	29.6	39.7	68.7	2.0	(NA)	(NA)
2435	HARDWOOD VENEER AND PLYWOOD	7	7	.4	2.5	.4	.8	2.0	8.6	12.2	17.3	.1	(NA)	(NA)
2439	STRUCTURAL WOOD MEMBERS, NEC	55	23	1.2	8.8	.9	1.8	5.6	17.2	24.2	41.4	1.0	(NA)	(NA)
244	WOOD CONTAINERS	26	14	1.5	6.6	1.4	2.7	5.4	11.6	12.7	24.0	.6	(NA)	(NA)
2449	WOOD CONTAINERS, NEC	12	6	1.0	4.2	.9	1.8	3.5	7.3	8.8	15.9	.4	(NA)	(NA)
245	WOOD BUILDINGS AND MOBILE HOMES	56	47	4.5	35.6	3.9	7.6	27.7	71.0	133.2	203.3	5.0	(NA)	(NA)
2451	MOBILE HOMES	50	41	4.2	34.1	3.7	7.2	26.5	66.1	128.9	194.4	4.9	(NA)	(NA)
2452	PREFABRICATED WOOD BUILDINGS	6	6	.3	1.6	.2	.4	1.2	4.9	4.2	9.0	.1	(NA)	(NA)
249	MISCELLANEOUS WOOD PRODUCTS	98	18	1.3	8.0	1.1	2.2	5.9	18.8	27.2	45.6	1.6	(NA)	(NA)
2491	WOOD PRESERVING	22	8	.6	3.8	.5	1.0	2.8	9.6	18.9	28.2	.6	.5	4.6
2499	WOOD PRODUCTS, NEC	76	10	.8	4.2	.6	1.2	3.2	9.2	8.3	17.4	1.0	(NA)	(NA)
25	FURNITURE AND FIXTURES	458	129	10.5	67.6	8.5	17.1	47.5	126.6	106.5	231.4	6.8	7.4	62.3
251	HOUSEHOLD FURNITURE	313	89	7.1	42.7	6.0	11.8	30.9	80.1	71.7	151.1	3.8	(NA)	(NA)
2511	WOOD HOUSEHOLD FURNITURE	168	30	2.6	14.4	2.3	4.5	11.1	27.8	20.8	48.3	(D)	(NA)	(NA)
2512	UPHOLSTERED HOUSEHOLD FURNITURE	36	20	1.7	10.5	1.4	2.6	7.4	16.8	16.7	33.6	.6	(NA)	(NA)
2514	METAL HOUSEHOLD FURNITURE	37	15	1.1	6.6	1.0	1.9	5.0	12.8	9.4	22.1	.4	.7	4.8

See footnotes at end of table.

TABLE 3. General Statistics for the State, by Industry Groups and Industries: 1972 and 1967—Continued

(See appendix, Explanation of Terms)

Code	Industry	1972											1967	
		Establishments		All employees		Production workers			Value added by manufacture (million dollars)	Cost of materials <sup>1</sup> (million dollars)	Value of shipments <sup>1</sup> (million dollars)	Capital expenditures, new (million dollars)	All employees (1,000)	Value added by manufacture (million dollars)
		Total	With 20 employees or more	Number	Payroll	Number	Man-hours	Wages						
		(number)	(number)	(1,000)	(million dollars)	(1,000)	(million)	(million dollars)						
2515	MATTRESSES AND BEDSPRINGS. . . . .	54	10	1.2	8.2	1.0	2.0	5.2	16.9	21.1	37.8	.7	1.0	9.1
252	OFFICE FURNITURE. . . . .	19	9	.6	4.1	.5	1.0	2.9	8.5	5.0	13.5	.2	(NA)	(NA)
254	PARTITIONS AND FIXTURES. . . . .	66	23	1.4	10.3	1.1	2.1	6.6	16.9	12.6	29.4	1.5	1.2	11.7
2541	WOOD PARTITIONS AND FIXTURES. . . . .	55	19	1.2	8.9	.9	1.9	5.8	14.4	10.5	25.0	.4	1.0	9.7
259	MISC. FURNITURE AND FIXTURES. . . . .	49	14	1.3	9.4	.9	1.9	6.2	19.0	15.9	34.5	1.3	.4	3.8
26	PAPER AND ALLIED PRODUCTS. . . . .	123	79	15.8	152.5	13.0	26.7	115.8	352.5	451.9	805.0	44.2	16.3	290.9
2631	PAPERBOARD MILLS. . . . .	6	6	3.6	43.4	2.9	6.3	32.3	103.3	135.8	239.6	24.3	3.9	92.0
264	MISC. CONVERTED PAPER PRODUCTS. . . . .	55	26	4.1	33.2	3.5	7.1	27.0	86.9	102.8	189.7	1.8	4.5	63.5
2643	BAGS, EXCEPT TEXTILE BAGS. . . . .	14	9	1.9	15.1	1.6	3.2	12.2	37.2	55.6	92.6	.9	3.6	52.0
2648	STATIONERY PRODUCTS. . . . .	15	5	.4	2.3	.3	.6	1.6	4.8	5.2	9.9	.3	(NA)	(NA)
265	PAPERBOARD CONTAINERS AND BOXES. . . . .	57	40	4.4	34.9	3.6	7.2	24.7	72.3	107.9	179.1	8.7	4.4	52.5
2651	FOLDING PAPERBOARD BOXES. . . . .	10	5	.7	4.0	.6	1.1	2.8	8.4	8.8	16.8	2.5	.4	4.1
2652	SETUP PAPERBOARD BOXES. . . . .	8	4	.3	1.3	.2	.4	.9	2.8	2.1	4.8	.1	.3	2.1
2653	CORUGATED AND SOLID FIBER BOXES. . . . .	25	20	2.6	22.1	2.0	4.0	15.1	38.2	66.2	104.8	4.3	2.2	24.6
2654	SANITARY FOOD CONTAINERS. . . . .	6	5	.4	3.2	.3	.7	2.3	9.7	11.7	21.3	.8	.5	6.9
2655	FIBER CANS, DRUMS, SIMILAR PRODUCTS. . . . .	8	6	.5	4.3	.4	1.0	3.5	13.2	19.0	31.4	1.0	.9	14.9
27	PRINTING AND PUBLISHING. . . . .	1 431	215	27.7	220.3	15.9	30.9	115.0	474.5	197.9	675.1	32.0	20.3	224.9
2711	NEWSPAPERS. . . . .	238	63	15.5	123.7	6.8	12.7	50.2	284.3	98.3	382.6	20.3	12.5	142.8
2721	PERIODICALS. . . . .	78	6	.5	4.3	.2	.4	1.5	19.9	11.2	30.8	.5	.2	5.1
273	BOOKS. . . . .	52	10	.9	7.0	.6	1.2	4.3	12.8	6.5	19.1	.4	.4	4.2
2732	BOOK PRINTING. . . . .	18	9	.7	5.9	.6	1.0	3.9	10.0	4.9	14.7	.3	.88	(0)
2741	MISCELLANEOUS PUBLISHING. . . . .	77	10	.8	6.2	.5	1.0	3.2	14.3	3.9	18.3	1.3	.3	2.9
275	COMMERCIAL PRINTING. . . . .	376	90	7.7	61.8	5.9	11.1	43.4	113.4	62.5	175.8	7.6	(NA)	(NA)
2751	COMMERCIAL PRINTING, LETTERPRESS. . . . .	559	32	3.4	24.1	2.6	4.6	17.3	46.9	27.1	73.9	3.4	(NA)	(NA)
2752	COMMERCIAL PRINTING, LITHOGRAPHIC. . . . .	295	52	4.0	35.9	3.1	6.3	24.8	63.3	35.4	97.3	4.2	(NA)	(NA)
2753	MANIFOLD BUSINESS FORMS. . . . .	23	13	.8	6.9	.6	1.2	4.5	13.0	10.7	23.0	.6	.4	5.1
2762	BLANKBOOKS AND LOOSELEAF BINDERS. . . . .	11	7	.4	2.0	.3	.6	1.7	4.8	1.9	6.7	(0)	.2	1.4
279	PRINTING TRADE SERVICES. . . . .	102	15	.8	7.3	.6	1.2	5.4	13.9	2.4	16.2	.6	(NA)	(NA)
2791	TYPESETTING. . . . .	69	10	.4	3.8	.4	.7	3.0	6.5	.9	7.4	.3	.4	3.6
28	CHEMICALS AND ALLIED PRODUCTS. . . . .	384	111	19.0	173.8	13.3	28.0	109.2	501.4	575.4	1 079.0	54.3	20.7	(NA)
281	INDUSTRIAL INORGANIC CHEMICALS. . . . .	26	6	.5	4.4	.3	.7	2.8	15.1	15.8	30.8	1.1	(NA)	(NA)
282	PLASTICS MATERIALS AND SYNTHETICS. . . . .	10	7	5.8	56.0	4.5	9.0	40.8	152.1	86.0	240.3	11.1	(NA)	(NA)
2821	PLUGS. . . . .	28	5	1.0	9.0	.7	1.3	3.9	32.7	31.0	62.3	1.1	.7	11.1
2822	SOAPS, CLEANERS, AND TOILET GOODS. . . . .	81	11	1.1	10.1	.7	1.3	4.1	36.5	22.8	58.5	3.7	(NA)	(NA)
2823	POLISHES AND SANITATION GOODS. . . . .	34	3	.3	2.2	.2	.4	1.1	11.0	9.7	20.5	(0)	(NA)	(NA)
2824	TOILET PREPARATIONS. . . . .	21	4	.5	5.0	.3	.6	1.6	16.6	4.9	20.9	.5	.88	(0)
2831	PAINTS AND ALLIED PRODUCTS. . . . .	69	14	1.4	9.8	.6	1.3	3.9	29.2	29.3	58.0	1.0	1.3	16.8
284	INDUSTRIAL ORGANIC CHEMICALS. . . . .	17	11	2.1	19.8	1.4	3.1	12.5	52.0	60.6	112.7	7.5	(NA)	(NA)
2841	AGRICULTURAL CHEMICALS. . . . .	92	49	6.5	58.9	4.7	10.5	38.5	169.3	318.6	491.0	27.6	(NA)	(NA)
2842	PHOSPHATIC FERTILIZERS. . . . .	15	15	4.7	44.2	3.7	8.1	32.0	130.4	224.1	357.2	25.8	(NA)	(NA)
2843	FERTILIZERS, MIXING ONLY. . . . .	51	27	1.4	10.7	.8	1.8	4.7	21.9	69.0	90.7	1.3	1.7	22.9
285	MISCELLANEOUS CHEMICAL PRODUCTS. . . . .	63	6	.6	5.7	.4	.8	2.8	14.5	11.3	25.3	1.1	(NA)	(NA)
2851	PETROLEUM AND COAL PRODUCTS. . . . .	51	16	.9	7.2	.6	1.3	4.6	24.9	43.4	68.1	4.9	.8	8.9
2852	PAVING AND ROOFING MATERIALS. . . . .	36	12	.6	5.2	.5	.9	3.4	20.3	31.8	52.1	1.7	.6	8.4
2853	PAINTS, MIXTURES AND FLOCKS. . . . .	23	0	.3	2.8	.2	.5	1.8	6.7	14.6	21.4	1.2	.4	4.9
2854	ASPHALT FELTS AND COATINGS. . . . .	13	0	.3	2.3	.2	.5	1.6	13.6	17.1	30.7	.5	.2	3.5
29	RUBBER AND MISC. PLASTICS PROD. . . . .	320	90	9.2	59.2	7.7	15.4	42.9	127.8	89.0	212.5	16.3	(NA)	(NA)
291	MISCELLANEOUS PLASTICS PRODUCTS. . . . .	290	86	6.5	43.9	5.4	10.7	30.4	103.7	72.0	173.7	13.6	(NA)	(NA)
30	LEATHER AND LEATHER PRODUCTS. . . . .	71	27	3.4	16.9	3.1	6.1	13.4	26.6	21.4	47.1	2.1	2.6	16.1
301	FOOTWEAR, EXCEPT RUBBER. . . . .	24	11	1.9	9.5	1.7	3.4	7.6	13.7	10.4	23.6	1.8	.88	(0)
3011	WOMEN'S FOOTWEAR, EXCEPT ATHLETIC. . . . .	16	6	1.0	4.8	.8	1.6	3.4	7.3	4.9	11.7	.3	(NA)	(NA)
31	STONELY, CLAY, AND GLASS, EXCEPT. . . . .	651	240	18.0	143.4	13.5	28.2	96.9	363.3	350.5	712.0	44.9	12.5	184.9
311	GLASS, GLASSWARE, PRESSED OR BLOWN. . . . .	11	4	1.7	14.8	1.5	3.0	12.5	33.6	20.5	54.3	2.0	1.4	21.6
3111	GLASS CONTAINERS. . . . .	4	4	1.7	14.7	1.5	3.0	12.4	33.4	20.5	54.0	1.9	.88	(0)
312	STRUCTURAL CLAY PRODUCTS. . . . .	12	6	1.1	6.9	1.0	2.1	5.9	15.6	9.4	24.9	2.5	.88	(0)
313	CONCRETE, GYPSUM, PLASTER PRODUCTS. . . . .	506	205	12.0	94.0	8.4	17.7	56.8	223.7	270.7	493.8	32.2	8.2	106.7
3131	CONCRETE BLOCK AND BRICK. . . . .	63	24	1.1	8.7	.7	1.6	4.7	20.7	19.8	40.4	2.3	.9	13.4
3132	CONCRETE PRODUCTS, NEC. . . . .	245	71	4.7	32.7	3.7	7.4	23.3	67.3	47.5	113.7	5.5	3.6	35.8
3133	HEAVY MIXED CONCRETE. . . . .	191	105	5.7	47.1	3.5	7.6	24.6	115.2	184.5	300.5	23.4	3.2	48.1
32	MISC. NONMETALLIC MINERAL PRODUCTS. . . . .	36	8	1.3	11.4	1.1	2.3	8.8	34.6	19.4	53.2	2.7	(NA)	(NA)
321	PRIMARY METAL INDUSTRIES. . . . .	90	38	3.6	28.0	2.9	6.1	20.2	66.5	89.5	153.6	4.7	3.0	43.7
3211	IRON AND STEEL FOUNDRIES. . . . .	14	9	.9	5.9	.7	1.4	4.3	9.3	6.5	15.6	.8	.9	7.9
3212	NONFERROUS FOUNDRIES. . . . .	30	4	.4	7.0	.4	.7	2.3	5.7	3.0	8.7	.2	.3	2.4
3213	ALUMINUM FOUNDRIES. . . . .	25	6	.3	2.1	.3	.5	1.6	4.2	2.1	6.3	.1	.2	1.5
33	FABRICATED METAL PRODUCTS. . . . .	818	251	25.3	202.6	19.1	38.4	132.6	421.0	513.5	928.4	24.0	(NA)	(NA)
331	METAL CANS AND SHIPPING CONTAINERS. . . . .	20	14	3.1	33.7	2.7	5.4	28.4	86.3	137.1	219.9	3.7	(NA)	(NA)

(See footnotes at end of table.)



TABLE 3. General Statistics for the State, by Industry Groups and Industries: 1972 and 1967—Continued

(See appendix: Explanation of Terms)

Code	Industry	1972											1967	
		Establishments		All employees		Production workers			Value added by manufacture	Cost of materials <sup>1</sup>	Value of shipments <sup>1</sup>	Capital expenditures, new	All employees	Value added by manufacture
		Total	With 20 employees or more	Number	Payroll	Number	Man-hours	Wages						
		(number)	(number)	(1,000)	(million dollars)	(1,000)	(million)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(1,000)	(million dollars)
3411	METAL CAN, . . . . .	17	11	2.8	32.6	2.5	5.2	27.0	84.1	133.5	214.0	3.6	2.1	45.8
3412	METAL BARRELS, DRUMS, AND PAILS, . . .	3	3	.3	1.1	.2	.2	.6	2.3	3.6	5.9	(2)	(NA)	(NA)
3419	METALWARE, HANDTOOLS AND HARDWARE, . .	39	10	1.2	9.0	.9	1.8	5.2	18.8	11.1	20.5	.5	.9	8.9
3420	METALWARE, NEC. . . . .	27	8	1.0	7.9	.7	1.5	4.3	17.1	10.1	26.8	.4	.8	7.6
3441	FABRICATED STRUCTURAL METAL PROD. . .	445	167	15.6	121.0	11.3	22.7	73.0	242.3	287.6	529.9	13.6	12.4	122.5
3442	FABRICATED STRUCTURAL METAL PRODUCTS	63	31	2.3	18.3	1.6	3.2	10.6	28.0	54.4	81.9	(0)	2.1	19.4
3443	METAL DOORS, SASH, AND TRIP, . . . . .	94	46	5.5	36.9	4.3	8.7	22.9	71.1	79.1	149.2	4.6	5.2	51.5
3444	FABRICATED PLATEWORK (BUILDERS' SUPPL.)	32	15	1.9	17.8	1.3	2.4	9.6	57.8	39.7	99.5	2.2	1.1	8.9
3445	HEAT METALWORK, . . . . .	145	49	3.4	25.6	2.5	5.2	17.6	51.4	48.4	98.7	2.6	1.8	20.8
3446	ARCHITECTURAL METALWORK, . . . . .	73	8	.8	6.0	.6	1.2	3.7	9.3	6.6	15.9	.7	1.0	8.7
3448	PRE-FABRICATED METAL BUILDINGS, . . . .	7	3	.3	2.3	.2	.5	1.5	3.2	3.2	5.5	(0)	(NA)	(NA)
3449	MISCELLANEOUS METAL WORK, . . . . .	31	15	1.3	14.1	.9	1.6	7.0	21.6	56.2	79.1	1.1	(NA)	(NA)
3451	SPRINKLER MACHINE PRODUCTS, BOLTS, ETC	27	8	.9	6.5	.8	1.7	4.8	5.8	11.9	18.4	.9	.6	6.8
3452	SCREW MACHINE PRODUCTS, . . . . .	18	5	.3	2.0	.2	.5	1.4	4.3	2.1	6.3	.3	.3	3.3
3453	BOLTS, NUTS, RIVETS, AND WASHERS, . .	9	3	.6	4.4	.5	1.2	3.4	1.4	9.8	12.0	.6	.3	3.5
3461	METAL FURTINGS AND STAMPINGS, . . . .	35	11	.9	6.7	.8	1.6	5.0	19.0	24.2	41.4	1.0	(NA)	(NA)
3462	METAL SERVICES, NEC. . . . .	86	9	.8	5.7	.7	1.3	4.1	10.8	3.8	14.7	.5	1.4	15.6
3463	PLATING AND POLISHING, . . . . .	64	7	.6	4.2	.5	1.0	3.0	7.8	2.6	10.4	.4	1.2	12.6
3464	ORDNANCE AND ACCESSORIES, NEC. . . . .	7	4	.6	4.4	.4	.8	2.3	7.1	6.5	12.9	.1	(NA)	(NA)
3465	MISC. FABRICATED METAL PRODUCTS, . . .	141	29	2.0	13.9	1.4	2.9	8.8	26.1	27.1	53.0	3.2	(NA)	(NA)
3466	VALVES AND PIPE FITTINGS, . . . . .	14	3	.3	1.9	.2	.4	1.2	3.3	2.0	5.2	.5	.3	3.1
3467	MISC. FABRICATED WIRE PRODUCTS, . . . .	32	4	.3	1.5	.2	.5	1.1	4.1	3.4	7.5	.3	(NA)	(NA)
3468	FABRICATED METAL PRODUCTS, NEC. . . . .	83	16	1.2	8.5	.8	1.5	5.0	14.5	15.4	29.9	2.0	(NA)	(NA)
3511	MACHINERY, EXCEPT ELECTRICAL, . . . .	851	157	16.2	154.0	9.8	20.1	72.6	277.7	254.3	525.5	17.5	12.5	211.1
3512	ENGINES AND TURBINES, . . . . .	8	2	.3	2.1	.3	.5	1.5	4.4	5.1	9.0	.2	(NA)	(NA)
3513	FARM AND GARDEN MACHINERY, . . . . .	45	8	.6	5.3	.4	.8	2.9	10.5	14.2	24.7	.5	(NA)	(NA)
3521	CONSTRUCTION AND RELATED MACHINERY	53	19	1.4	11.6	1.0	1.9	7.0	19.1	14.3	33.6	.5	.5	6.9
3522	LIFT AND OPS AND MOVING STAIRWAYS, . . .	4	4	.3	3.2	.2	.4	2.0	6.2	3.3	9.6	.1	(NA)	(NA)
3531	METALWORKING MACHINERY, . . . . .	133	21	1.7	14.0	1.3	2.8	10.6	26.3	12.2	37.8	3.0	1.4	18.0
3532	SPECIAL DIES, TOOLS, JIG, FIXTURE, . . .	69	13	.9	9.7	.7	1.5	6.3	15.2	5.4	20.5	2.2	1.0	12.4
3541	SPECIAL INDUSTRY MACHINERY, . . . . .	66	21	2.5	21.3	1.4	3.0	10.6	39.4	28.0	66.7	3.9	EE	(0)
3542	SPECIAL INDUSTRY MACHINERY, NEC. . . . .	25	7	.8	6.7	.5	1.0	3.5	9.4	11.2	21.2	.4	.6	5.5
3561	GENERAL INDUSTRIAL MACHINERY, . . . . .	69	20	1.3	10.9	.9	1.8	6.3	23.4	16.2	38.7	1.1	.9	11.4
3571	OFFICE AND COMPUTING MACHINES, . . . . .	39	16	4.9	56.1	1.8	3.7	13.1	99.3	130.0	225.1	5.3	FF	(0)
3572	REFRIGERATION, SERVICE MACHINERY, . . .	66	13	1.0	8.0	.7	1.4	4.7	16.9	17.8	35.0	.7	.8	10.3
3573	SERVICE INDUSTRY MACHINERY, NEC. . . . .	21	3	.3	2.6	.3	.5	1.8	5.9	5.8	11.8	.2	.3	4.3
3611	MISC. MACHINERY, EXCEPT ELECTRICAL	372	37	2.6	22.0	2.0	4.2	16.0	38.4	16.5	54.9	2.3	(NA)	(NA)
3612	ELECTRIC, ELECTRONIC EQUIPMENT, . . . .	352	139	32.6	283.5	20.1	40.0	131.3	566.0	305.8	851.6	32.0	(NA)	(NA)
3621	TRANSFORMERS, . . . . .	4	4	.6	4.1	.5	1.1	3.1	15.1	14.9	28.9	.3	AA	(0)
3631	CURRENT-CARRYING WIRING DEVICES, . . . .	10	6	.6	4.3	.5	1.1	3.1	12.2	5.9	17.5	.3	BB	(0)
3641	COMMUNICATION EQUIPMENT, . . . . .	81	48	17.8	170.3	9.5	18.8	67.6	308.1	167.6	471.1	16.0	13.4	168.1
3642	ELECTRONIC COMPONENTS AND ACCESS.	84	42	8.1	63.2	5.6	11.3	34.2	128.1	57.6	176.7	7.2	6.6	65.2
3651	MISC. ELECTRICAL EQUIP., SUPPLIES, . . .	65	12	2.8	24.2	1.8	3.5	12.1	66.0	32.9	94.5	3.4	1.3	14.2
3652	STORAGE BATTERIES, . . . . .	10	5	1.4	11.4	1.2	2.4	8.3	22.2	21.0	40.9	2.3	.8	7.3
3711	TRANSPORTATION EQUIPMENT, . . . . .	554	170	26.3	244.7	19.1	38.4	146.6	408.9	271.7	657.5	36.1	(NA)	(NA)
3712	MOTOR VEHICLES AND EQUIPMENT, . . . . .	97	24	1.7	13.4	1.4	2.8	9.5	25.8	26.1	52.0	1.1	1.1	11.8
3713	TRUCK AND BUS BODIES, . . . . .	30	12	.5	3.5	.4	.7	2.5	5.6	7.6	13.1	.4	AA	(0)
3714	MOTOR VEHICLE PARTS AND ACCESSORIES, . .	54	10	1.1	8.8	.9	1.9	6.2	18.1	13.9	32.3	(0)	.4	5.2
3721	AIRCRAFT ENGINES AND ENGINE PARTS, . . .	15	6	.7	7.5	.5	.8	3.9	13.3	10.4	23.8	.6	(NA)	(NA)
3731	SHIP, BOAT BUILDING, REPAIRING, . . . . .	315	84	11.2	86.5	9.4	19.2	68.7	143.0	115.6	252.7	23.1	10.3	99.4
3732	SHIP BUILDING AND REPAIRING, . . . . .	45	21	4.2	36.6	3.8	8.1	31.2	56.3	30.8	87.1	14.4	5.5	60.0
3733	BOAT BUILDING AND REPAIRING, . . . . .	270	63	7.0	49.9	5.7	11.1	37.5	86.8	84.8	165.6	8.7	4.8	39.4
3741	GUIDED MISSILES, SPACE VEHICLES, . . . .	13	11	5.9	85.5	2.5	5.2	28.2	112.7	25.7	134.1	7.1	(NA)	(NA)
3791	MISC. TRANSPORTATION EQUIPMENT, . . . .	65	21	1.7	11.9	1.4	2.7	9.4	25.1	49.3	73.9	1.7	(NA)	(NA)
3811	INSTRUMENTS AND RELATED PRODUCTS, . . .	165	71	6.2	46.7	.3	.1	2.0	22.7	48.7	113.0	.1	(NA)	(NA)
3821	MEASURING AND CONTROLLING DEVICES, . . .	23	4	.6	3.9	.4	.8	1.9	5.1	2.9	7.9	.2	(NA)	(NA)
3822	INSTRUMENTS TO MEASURE ELECTRICITY, . .	9	2	.4	2.6	.2	.4	1.2	3.2	2.1	5.2	.1	(NA)	(NA)
3841	MEDICAL INSTRUMENTS AND SUPPLIES, . . .	70	12	2.7	22.1	1.9	3.8	12.4	47.3	22.3	68.0	4.0	1.1	16.6
3842	SURGICAL APPLIANCES AND SUPPLIES, . . .	41	3	.4	2.5	.3	.5	1.3	6.6	3.7	10.0	(0)	AA	(0)

See footnotes at end of table.

TABLE 3. General Statistics for the State, by Industry Groups and Industries: 1972 and 1967—Continued

(See appendix, Explanation of Terms)

Code	Industry	1972										1967		
		Establishments		All employees		Production workers			Value added by manufacture	Cost of materials <sup>1</sup>	Value of shipments <sup>1</sup>	Capital expenditures, new	All employees	Value added by manufacture
		Total	With 20 employees or more	Number	Payroll	Number	Man-hours	Wages						
		(number)	(number)	(1,000)	(million dollars)	(1,000)	(million)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(1,000)	(million dollars)	
3961	PHOTOGRAPHIC EQUIPMENT AND SUPPLIES.	13	3	.6	4.5	.4	.6	1.7	3.8	5.8	9.5	1.2	AA	(D)
39	MISC. MANUFACTURING INDUSTRIES	551	62	5.9	35.9	4.9	8.9	24.7	69.8	58.4	126.7	4.6	4.0	34.7
391	JEWELRY, SILVERWARE, PLATED WARE	47	5	.5	3.6	.4	.8	2.4	6.7	8.6	15.2	.4	(NA)	(NA)
3911	JEWELRY, PRECIOUS METAL. . . . .	30	4	.4	3.0	.3	.8	2.0	5.4	7.2	12.5	.4	(NA)	(NA)
394	TOYS AND SPORTING GOODS. . . . .	103	17	2.2	11.1	1.8	3.3	7.8	24.3	19.8	42.8	1.1	1.2	9.8
395	PENS, PENCILS, OFFICE, ART GOODS	35	3	.4	2.3	.3	.6	1.7	3.4	2.9	7.4	.4	(NA)	(NA)
396	COSTUME JEWELRY AND NOTIONS. . . .	29	4	.4	1.9	.3	.7	1.5	4.7	4.4	8.1	(D)	.2	1.3
399	MISCELLANEOUS MANUFACTURES . . . .	332	33	2.6	16.8	2.0	3.5	11.2	30.4	22.6	53.0	1.3	2.3	20.7
3943	SIGNS AND ADVERTISING DISPLAYS . . . .	172	15	1.1	9.2	.8	1.4	6.4	14.2	9.4	23.6	.7	1.0	10.6
3999	MANUFACTURING INDUSTRIES, NEC. . . .	144	13	1.2	6.2	1.0	1.7	3.9	13.2	9.6	22.8	.5	.9	6.3
--	ADMINISTRATIVE AND AUXILIARY . . . .	192	73	6.4	79.0	-	-	-	-	-	-	-	4.0	-

Note: The following symbols indicate employment size range for 1967:

AA Less than 250 employees      EE 1,000 to 2,499 employees  
BB 250 to 499 employees      FF 2,500 employees and over  
CC 500 to 999 employees

- Represents zero. (NA) Not available. Because of a revision to this industry or industry group in the 1972 edition of the SIC manual, 1967 census data are not available on a comparable basis. (D) Withheld to avoid disclosing figures for individual companies. Z) Less than half of the unit of measurement shown.

<sup>1</sup>The total cost of materials and value of shipments for industry groups shown may include extensive duplication arising from shipments between establishments in the same industry classification. (For a more complete explanation, see appendix.)

<sup>2</sup>Includes figures for industry groups which have been withheld from publication in order to (a) avoid disclosing figures for individual companies or (b) permit further checking of figures for smaller industry groups. Additional detail will appear in the final report for this State.



## Appendix A. SCOPE AND COVERAGE

This report is one of a series presenting preliminary information, by State, from the 1972 Census of Manufactures. The data will be superseded in a final report which, in turn, will be included in *Volume III, Area Statistics, 1972 Census of Manufactures*. The final report will include a comprehensive discussion of the concepts and definitions used in the census.

The census of manufactures covers each manufacturing establishment in the United States with one paid employee or more; manufacturing establishments with no employees are excluded. Firms which operated more than one establishment were required to file a separate report for each location. Companies which engaged in distinctly different lines of activity at one location were asked to submit separate reports if the company records permitted such a separation and the activities were of significant size.

This report includes figures for administrative offices, warehouses, garages, or other auxiliary units which service manufacturing establishments.

In the 1972 census, the approximately 120,000 manufacturing establishments with fewer than 10 employees were excused from filing reports. Under special arrangements which safeguarded the confidentiality of both tax and census records, data on payrolls, sales, and industry classification from the administrative records of the Social Security Administration and the Internal Revenue Service were made available to the Census Bureau for use in the 1972 Economic Censuses (retail and wholesale trade, service industries, construction industries, manufactures, and mineral industries). Estimates for data other than payrolls and sales for these small establishments were constructed from industry averages. The effect on industry aggregates is slight in most industries. For manufacturing as a whole, these small establishments account for less than 3 percent of the payrolls and value added.

Establishments are classified by industry in accordance with industry definitions described in the 1972 edition of the Standard Industrial Classification (SIC) Manual. For 1972, the SIC was significantly revised and the comparability with prior year's data for some industries was significantly affected. The comparability at the 2- and 3-digit SIC levels was less affected. The final volumes of the 1972 Census of Manufactures will contain a table relating aggregates based on the 1972 SIC with aggregates derived from classifying establishments according to the 1967 SIC definitions.

As in earlier censuses, a number of small establishments may have been misclassified as to industry. However, such possible misclassifications have significant effect on *none* of the statistics except the number of establishments. As indicated above, report forms were not mailed to very small establishments (fewer than 10 employees). The industry classifications for these establishments were assigned on the basis of brief descriptions of the general activity of the establishment. Where the description is incomplete or there are relatively fine lines of demarcation among industries or between manufacturing and nonmanufacturing activity, the code assigned to an establishment could differ from that which would have been assigned on the basis of more complete product information. Therefore, the total establishment count for individual industries should be viewed as an approximation rather than a precise measurement. The counts for establishments with 20 employees or more are more reliable than the total number of establishments.

More detailed figures for this State will appear in the final census reports. Final reports will also include a comprehensive discussion of such concepts as "industry" and "establishment," as well as the various statistical items such as "employment," "value of shipments," and "value added." Similar preliminary and final reports will be issued for other States during the coming months. A series of preliminary summary reports showing U.S. totals for each manufacturing industry and for each State are being issued. Final industry reports and final area reports will be published during 1974.

Order forms describing the individual reports and listing their prices may be obtained from any U.S. Department of Commerce district office or from the Publications Distribution Section, Social and Economic Statistics Administration, Washington, D.C. 20233.

The 1972 Census of Manufactures is the 29th census of manufacturing establishments in the United States. For 1972, it was conducted jointly with the censuses of mineral industries, construction industries, retail trade, wholesale trade, and selected services under authority of Title 13 of the United States Code. Title 13 specifies that a census of manufactures be conducted every 5 years and, as amended, to cover years ending in "2" and "7". Title 13 also authorizes an annual sample survey of manufacturing establishments in interim years.



## Appendix B. EXPLANATION OF TERMS

*(For a more complete discussion of these terms and the method of compiling the Census of Manufactures, see the "Introduction" to the 1967 Census of Manufactures, Volume III).*

**All Employees**—All full-time and part-time employees on the payrolls of operating manufacturing establishments for any part of the pay period ending nearest the 12th of the months specified on the report form. Included are all persons on paid sick leave, paid holidays, and paid vacations during these pay periods. Officers of corporations are included as employees; proprietors and partners of unincorporated firms are excluded. The "all employee" number is the average number of production workers for the midmonth payroll period of March, May, August, and November plus the number of nonproduction employees in mid-March.

**Number of Production Workers**—Workers (up through the working foreman level) engaged in fabricating, processing, assembling, inspecting, receiving, packing, warehousing, shipping (but not delivering), and maintenance, repair, janitorial, and watchman services, product development, auxiliary production for plant's own use (e.g., powerplant), recordkeeping, and other closely associated services. Proprietors and partners are excluded.

**Payroll**—This item includes all forms of compensation such as salaries, wages, commissions, dismissal pay, bonuses, vacation and sick leave pay, and compensation in kind, prior to such deductions as employees' Social Security contributions, withholding taxes, group insurance, union dues, and savings bonds. The total includes salaries of officers of these establishments, if a corporation; it excludes payments to the proprietor or partners, if an unincorporated concern. Respondents were told that in reporting they could follow the definition of payrolls used for calculating the Federal withholding tax.

**Man-Hours of Production Workers**—This total relates to production-worker man-hours worked or paid for at the plant including actual overtime hours (not straight-time equivalent hours). It excludes hours paid for vacation, holidays, or sick leave when the employee was not at the plant.

**Cost of Materials**—The term "Cost of Materials" refers to charges actually paid or payable for items consumed or put into production during the year, including freight and other direct charges incurred by the establishment in acquiring these materials. It includes the cost of materials or fuel consumed regardless of

whether these items were purchased by the establishment from other companies, transferred to it from other establishments of the same company, or withdrawn from inventory during the year. The establishment was requested to value materials transferred from other parts of the company at its approximate market value, not at cost of production. The important components of this cost item are (a) all raw materials, semifinished goods, parts, components, containers, scrap, and supplies put into production or used as operating supplies and for repair and maintenance during the year; (b) electric energy purchased; (c) fuels consumed for heat, power, or the generation of electricity; (d) work done by others on materials or parts furnished by manufacturing establishments (contract work); and (e) products bought and resold in the same condition.

**Value of Shipments**—The value of shipments is the received or receivable net selling value, f.o.b. plant (exclusive of freight and taxes), of all products shipped, both primary and secondary, as well as all miscellaneous receipts such as receipts for contract work performed for others, installation and repair, sales of scrap, and sale of products bought and resold without further processing. Included are all items made by the establishment or for it under contract from materials owned by it whether sold, transferred to other plants of the same company, or shipped on consignment. The net selling value of products made in one plant on a contract basis from materials owned by another was reported by the plant providing the materials.

In the case of multiunit companies, the manufacturer was requested to report the value of products transferred to other establishments of the same company at full economic value; i.e., to include not only the direct costs of production but also a reasonable proportion of "all other costs" (including company overhead) and profit.

**Duplication in Cost of Materials and Value of Products**—The aggregate cost of materials and value-of-shipments figures for industry groups and for all manufacturing industries may include large amounts of duplication since the products of some industries are used as materials by others. With some important exceptions, such as motor vehicles and parts, this duplication is not significant within individual industries but arises from the addition of the totals of related industries in successive stages of the production of a finished manufactured product. Examples are the addition of flour mills to bakeries in the food group and the addition of pulp mills to paper mills in the paper and allied products group of industries. Esti-



mates of this duplication indicate that the value of manufactured products exclusive of such duplication—the value of finished manufactures—approximates two-thirds of the total value of products.

Prior to 1962, the Bureau of the Census did not publish figures for cost of materials or value of shipments if they contained significant duplication. Effective with the 1962 annual survey these figures were shown at all industry levels for the United States to meet the requests for their use in studies in which the presence of an indeterminate amount of duplication is not a limiting factor. However, they are appropriately footnoted. Effective with the 1964 annual survey, these industry group totals are also shown at the State, standard metropolitan statistical area, and large-county level.

Even where there is no significant amount of duplication, value-of-shipments figures are deficient as measures of the relative economic importance of individual manufacturing industries or geographic areas because of the wide variation in ratio of materials, labor, and other processing costs to value of shipments among industries.

**Value Added by Manufacture**—This measure of manufacturing activity is derived by subtracting the cost of materials, supplies, containers, fuel, purchased electricity, and cost of resales contract work from the value of shipments for products manufactured plus resales and receipts for services rendered. The result of this calculation is adjusted by the net change in finished goods and work-in-process inventories between the beginning and end of the year. (In the few industries that report value of production rather than value of shipments, only changes in work-in-process inventories are used to adjust value added. In the shipbuilding and repairing industry, no inventory adjustment is made.)

“Value added” avoids the duplication in the value of shipments figure which results from the use of products of some establishments as materials by others. Value added is considered to be the best value measure available for comparing the relative economic importance of manufacturing among industries and geographic areas.

**Expenditures for Plant and Equipment**—Manufacturing establishments in operation and establishments under construction but not yet in operation, were asked to report their expenditures for (a) permanent additions and major alterations to the manufacturing establishment, and (b) new machinery and equipment used for replacement purposes and additions to plant capacity if they are of the type for which depreciation accounts are ordinarily maintained.

These totals exclude expenditures for new facilities and equipment leased from nonmanufacturing concerns; new facilities owned by the Federal Government but operated under contract by private companies; and plant and equipment furnished to the manufacturer by communities and nonprofit organizations. Expenditures for used plant and equipment (although reported in the census), expenditures for land, and cost of maintenance and repairs charged as current operating expense are also omitted from the figures for new capital expenditures.

**Central Administrative Offices and Auxiliary Units**—In the 1972 census as in previous years, respondents were asked to file separate reports for central administrative offices or auxiliary units which were (1) at different locations from the establishments served or, (2) at the same location as one of these establishments but were not operated as an integral part thereof and served two or more establishments. The functions of employees in central administrative offices include general company policy determination, planning and management (that is, company purchasing, accounting, general engineering, direction of company personnel matters, and legal and patent matters). Auxiliaries are storage facilities, garages, repair shops, purchasing offices, sales promotion offices, and research laboratories serving the plants or central management of the company.

**Standard Metropolitan Statistical Areas**—Standard metropolitan statistical areas (SMSA) are integrated economic and social units with a large volume of daily travel and communication between the central city and outlying parts of the area.<sup>1</sup> Each area (except in New England) consists of one whole county or more. An area may contain not only highly industrialized counties but also adjoining counties which, though primarily residential in character, contribute significantly to the industrial counties' labor force and are socially and economically integrated with the central city. These areas are defined by the Federal Committee on Standard Metropolitan Statistical Areas of the Office of Management and Budget for general-purpose use throughout the Federal Government in presenting economic and social data. In the New England States, similar intergration criteria are applied in defining

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<sup>1</sup> Each standard metropolitan statistical area must include either (1) a city with 50,000 or more inhabitants, or (2) a city having a population of at least 25,000 which (a) with the addition of the population of contiguous places has a population density of at least 1,000 persons per square mile; (b) constitutes, for general economic and social purposes, a single community with a combined population of at least 50,000; and (c) includes a total population of at least 75,000 in the county or counties in which the city and contiguous places are located.

SMSA's on a city and town basis because towns rather than counties are regarded as the significant unit in this region of the country.

The requirement that each SMSA consist of county units (except in New England) sometimes results in the inclusion in an area of considerable amount of territory which would not ordinarily be considered "metropolitan," much less "industrial." It is recognized that metropolitan areas could be more accurately defined in terms of smaller area segments such as minor civil

divisions, but the usefulness of areas so defined would be limited by the fact that many types of economic and social data are available only on a county basis.

Each SMSA is designated by the name of the principal city of the area. In addition to the name of the principal city, the area title may include one or two additional city names.

The data for SMSA's which changed definition since the 1967 census have not been retabulated on the new basis for years prior to 1972.



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## PRELIMINARY REPORT

**1972 CENSUS OF  
MANUFACTURES**

## AREA SERIES

2(P)-S11

U. S. DEPARTMENT OF COMMERCE • Social and Economic Statistics Administration • BUREAU OF THE CENSUS

ed April 1974

**Georgia**

Value added by manufacturing in 1972 in the State of Georgia amounted to \$7,362 million, a 13-percent increase from 1971 and a 57-percent increase from 1967.

This report presents preliminary results from the 1972 Census of Manufactures for the State, its Standard Metropolitan Statistical Areas, and its counties.

Data are provided for industry groups within the State. Historical data, back to 1958, are included for the State as a whole,

and 1967 figures on employment and value added are provided for the smaller areas.

The figures in this report have been subjected to only preliminary review and must be regarded as approximations of the final census figures. No adjustments have been made in the value figures for changes in price level.

For an explanation of the terms used in the tables, see the appendix at the end of this report.

**TABLE 1. General Statistics for the State: 1972 and Earlier Years**

(See appendix, Explanation of Terms)

Year	Establishments		All employees <sup>1</sup>		Production workers			Value added by manufacture	Cost of materials <sup>2</sup>	Value of shipments <sup>2</sup>	Capital expenditures, new
	Total	With 20 employees or more	Number	Payroll	Number	Man-hours	Wages				
	(number)	(number)	(1,000)	(million dollars)	(1,000)	(millions)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(million dollars)
GEORGIA											
1972 Census .....	7,540	2,619	462.5	3,296.7	364.8	731.5	2,227.5	7,362.2	10,967.6	18,276.6	632.5
1971 ASM .....	(NA)	(NA)	433.7	2,865.5	340.3	674.8	1,920.3	6,533.2	9,372.4	16,395.9	508.4
1970 ASM .....	(NA)	(NA)	441.9	2,724.3	344.7	683.4	1,811.5	5,482.7	8,331.1	14,263.3	453.3
1969 ASM .....	(NA)	(NA)	453.8	2,718.9	362.5	729.8	1,846.3	5,413.4	8,276.6	13,613.7	514.0
1968 ASM .....	(NA)	(NA)	429.0	2,438.4	344.6	700.4	1,475.3	5,102.6	7,623.9	12,654.1	414.2
1967 Census .....	6,976	2,268	423.1	2,231.2	339.3	684.6	1,522.2	4,683.6	7,054.6	11,713.0	423.3
1966 ASM .....	(NA)	(NA)	415.3	2,048.1	337.8	694.4	1,428.3	4,568.7	6,995.3	11,482.3	369.9
1965 ASM .....	(NA)	(NA)	393.5	1,833.8	322.4	661.5	1,301.3	4,053.8	6,370.6	10,350.3	308.9
1964 ASM .....	(NA)	(NA)	366.0	1,647.8	297.3	607.2	1,166.3	3,563.2	5,549.2	9,063.5	237.3
1963 Census .....	6,249	2,056	354.0	1,505.6	290.0	582.4	1,073.0	3,254.0	(NA)	(NA)	202.2
1962 ASM .....	(NA)	(NA)	327.8	1,346.9	271.2	546.3	956.5	2,856.5	(NA)	(NA)	191.2
1961 ASM .....	(NA)	(NA)	316.9	1,229.9	262.1	522.0	875.1	2,447.7	(NA)	(NA)	148.4
1960 ASM .....	(NA)	(NA)	322.6	1,210.8	266.6	525.5	862.6	2,496.9	(NA)	(NA)	173.1
1959 ASM .....	(NA)	(NA)	324.1	1,198.2	270.1	541.0	864.5	2,456.6	(NA)	(NA)	175.4
1958 Census .....	5,860	1,844	314.1	1,075.0	261.1	500.3	775.9	2,102.3	(NA)	(NA)	169.9

Note: "ASM" data are based on a representative sample of manufacturing establishments canvassed in the Annual Survey of Manufactures. These estimates may differ from the results of a complete canvass of all manufacturing establishments. The standard errors associated with these estimates are published in the annual survey of manufactures volumes for this period. For comparative purposes, the 1972 ASM estimate for the State of Georgia was 445 thousand employees, and \$7,119 million in value added with corresponding standard error of estimate of 1 and 1.

(NA) Not available.

<sup>1</sup>Includes employment and payroll at central administrative offices and auxiliary units. (For a definition of these units, see appendix.)

<sup>2</sup>The total cost of materials and value of shipments may include extensive duplication arising from shipments between establishments in the same industry classification. (For a more complete explanation, see appendix.)

TABLE 2. General Statistics for the State, Standard Metropolitan Statistical Areas, and Counties: 1972 and 1967

(See appendix, Explanation of Terms)

State, standard metropolitan statistical areas, and counties <sup>1</sup>	1972											1967	
	Establishments		All employees <sup>2</sup>		Production workers			Value added by manufacture	Cost of materials <sup>3</sup>	Value of shipments <sup>3</sup>	Capital expenditures, new	All employees	Value added by manufacture
	Total	With 20 employees or more	Number	Payroll	Number	Man-hours	Wages						
	(number)	(number)	(1,000)	(million dollars)	(1,000)	(million)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(1,000)	(million dollars)
GEORGIA, TOTAL . . . . .	7 540	2 619	462.5	3 296.7	364.8	731.5	2 227.5	7 362.2	10 967.6	18 276.6	632.5	423.1	4 683.6
STANDARD METROPOLITAN STATISTICAL AREAS <sup>4</sup>													
ALBANY . . . . .	97	42	8.9	64.2	7.3	14.5	46.1	189.9	213.9	396.7	10.4	5.7	66.6
ATLANTA . . . . .	2 201	823	130.8	1 178.8	88.9	177.8	675.7	2 599.4	3 942.3	6 435.9	157.4	117.2	1 604.0
AUGUSTA . . . . .	249	115	30.4	251.6	22.4	45.8	154.8	586.3	492.6	1 079.5	19.4	29.8	442.3
PORTION IN SOUTH CAROLINA . . . . .	75	37	16.4	148.4	12.0	24.6	90.2	325.5	177.4	505.2	4.1	16.1	257.3
PORTION IN GEORGIA . . . . .	174	78	14.0	103.1	10.4	21.2	64.6	260.8	315.2	574.3	15.2	13.7	185.0
CHATTANOOGA . . . . .	626	288	57.4	455.2	45.4	92.5	320.5	932.3	1 207.2	2 122.5	65.0	(D)	(D)
PORTION IN GEORGIA . . . . .	107	46	10.5	69.6	9.2	19.9	56.2	149.0	218.8	365.3	10.9	9.0	82.2
PORTION IN TENNESSEE . . . . .	519	242	46.9	385.6	36.2	72.6	264.3	783.3	988.4	1 757.2	54.1	(D)	(D)
COLUMBUS . . . . .	203	81	18.9	130.8	14.9	32.4	87.6	329.5	313.8	646.3	16.7	18.2	193.7
PORTION IN GEORGIA . . . . .	150	66	16.9	115.9	13.1	28.5	75.7	284.7	261.0	548.8	14.1	16.9	169.6
PORTION IN ALABAMA . . . . .	53	15	2.0	14.9	1.8	3.9	11.9	44.8	52.8	97.5	2.6	1.3	24.1
MACON . . . . .	255	86	12.6	95.1	9.7	19.4	65.2	235.5	285.6	516.8	17.0	14.5	165.8
SAVANNAH . . . . .	257	78	14.5	127.6	10.9	22.7	86.6	364.3	484.0	834.7	36.2	15.9	248.5
COUNTIES													
APPLING . . . . .	41	11	.9	4.3	.8	1.4	3.3	7.5	16.8	24.0	.5	.7	4.5
ATKINSON . . . . .	38	6	.4	2.2	.3	.7	1.6	4.2	8.2	12.4	.2	.2	2.3
BACON . . . . .	24	5	.7	3.6	.7	1.3	2.9	4.3	15.7	19.9	.6	.4	3.6
BALDWIN . . . . .	38	11	2.1	13.2	1.7	3.5	9.3	37.4	39.1	76.4	2.2	2.9	23.9
BARROW . . . . .	25	20	3.0	16.5	2.7	5.2	13.4	25.5	59.1	88.5	3.0	2.8	6.4
BARTOW . . . . .	77	42	7.5	43.2	6.1	12.0	31.0	125.1	215.8	333.3	8.0	4.6	56.7
BEN HILL . . . . .	38	12	1.6	8.7	1.4	2.8	6.4	20.2	30.1	51.1	1.4	1.3	7.3
BERRIE . . . . .	13	4	1.6	8.9	1.4	2.9	7.7	14.1	12.0	26.1	(D)	.6	2.2
BIBB . . . . .	182	73	10.8	82.3	8.4	17.0	56.7	192.7	215.8	404.7	15.0	13.7	159.9
BLECKLEY . . . . .	16	3	.7	2.3	.7	1.3	2.1	3.4	2.4	5.9	.2	.7	2.8
BROOKS . . . . .	15	3	.4	1.9	.4	.8	1.5	3.6	10.5	14.0	.1	.6	2.6
BULLOCH . . . . .	43	13	1.9	10.5	1.5	2.7	6.7	20.0	21.5	41.6	.7	1.5	15.7
BURKE . . . . .	30	7	1.3	5.6	1.1	1.8	4.1	13.5	14.7	27.5	.6	1.3	6.5
BUTTS . . . . .	14	6	1.2	6.0	1.1	2.0	5.0	12.7	12.7	26.5	1.0	1.0	10.4
CALHOUN . . . . .	14	2	.3	1.4	.2	.5	1.1	2.5	1.4	4.1	.9	.2	1.8
CAMDEN . . . . .	35	4	2.1	18.3	1.7	3.8	14.5	55.6	58.0	114.3	6.2	(D)	(D)
CANDLER . . . . .	16	4	.3	1.3	.3	.5	1.1	2.8	2.3	5.1	.4	.2	.9
CARROLL . . . . .	75	34	7.0	42.5	5.7	11.5	32.0	62.0	202.1	278.1	4.3	5.8	51.9
CATOOSA . . . . .	24	7	1.4	8.8	1.2	2.7	7.4	17.9	40.1	58.4	.2	1.7	12.6
CHATLON . . . . .	32	2	.4	2.0	.4	.8	1.7	7.7	4.3	11.8	.4	.1	1.4
CHATHAM . . . . .	194	71	14.0	125.1	10.5	21.8	84.5	359.7	478.6	824.6	35.6	15.5	247.1
CHATTOOGA . . . . .	23	11	5.3	29.5	4.9	10.4	25.6	109.0	100.5	209.7	3.2	5.0	66.0
CHEROKEE . . . . .	49	13	2.2	13.6	1.8	3.8	9.9	24.3	40.1	64.0	1.3	2.7	15.5
CLARKE . . . . .	82	43	8.3	52.0	6.5	12.8	35.5	114.4	159.1	278.5	7.3	7.1	45.9
CLAYTON . . . . .	88	34	3.8	33.0	2.9	5.9	22.7	79.9	97.0	176.4	5.7	3.4	39.6
CLINCH . . . . .	42	6	1.2	5.6	1.1	2.2	5.0	10.7	17.8	28.1	.6	1.0	8.1
COBB . . . . .	188	57	18.8	196.8	10.8	22.0	93.9	165.0	470.3	697.1	6.5	(D)	(D)
COFFEE . . . . .	67	21	3.0	15.9	2.7	5.5	12.7	34.4	55.9	89.7	1.8	1.9	14.5
COLQUITT . . . . .	60	23	3.7	22.0	3.1	6.3	17.3	37.4	79.6	115.6	3.1	2.7	23.0
COLUMBIA . . . . .	23	6	.7	4.4	.6	1.2	3.0	9.6	7.3	16.7	.6	.5	4.2
COOK . . . . .	30	10	1.6	9.6	1.3	2.4	7.2	19.5	27.6	46.9	.8	1.1	9.2
COWETA . . . . .	53	23	5.1	33.0	4.3	9.0	26.2	70.1	79.7	148.3	4.2	5.3	50.9
CRISP . . . . .	41	16	2.1	11.6	1.7	3.6	8.8	23.2	31.9	54.8	1.9	1.7	13.9
DADE . . . . .	13	5	.7	4.4	.7	1.4	3.9	9.1	16.0	24.7	.5	.2	.8
DECATUR . . . . .	45	15	1.9	10.7	1.5	3.1	7.3	20.5	33.0	53.4	1.3	1.7	14.5
DE KALB . . . . .	524	192	29.0	271.8	19.1	37.5	150.3	673.5	1 096.7	1 766.1	27.8	15.3	294.3
DODGE . . . . .	28	8	1.1	5.1	1.0	2.0	4.0	11.6	19.7	30.9	.3	1.3	9.1
DOOLY . . . . .	12	5	.6	2.5	.5	1.1	1.9	7.0	8.8	15.9	.6	.2	1.0
DOUGLAS . . . . .	25	6	.4	2.8	.3	.7	1.6	6.5	10.1	16.5	.3	.5	4.4
ELBERT . . . . .	88	29	2.4	13.8	2.1	4.0	10.9	21.4	12.0	32.4	.9	2.3	16.0
EMANUEL . . . . .	49	15	2.3	11.3	2.0	4.1	9.4	21.7	18.0	39.0	1.4	2.0	12.8
EVANS . . . . .	25	5	.8	3.6	.7	1.3	2.7	8.2	9.6	17.8	.3	.7	4.9
FANNIN . . . . .	17	5	1.0	4.6	1.0	1.8	4.3	13.8	14.1	27.4	.2	.7	5.0
FAYETTE . . . . .	23	8	.7	4.7	.5	1.0	3.1	11.8	16.1	27.2	1.0	.8	7.2
FLOYD . . . . .	109	48	12.1	92.8	10.1	20.4	67.3	207.8	239.4	444.6	15.7	10.5	160.2
FORSYTH . . . . .	17	4	.6	3.3	.6	1.2	2.8	6.7	14.2	20.9	.5	.9	5.1
FRANKLIN . . . . .	18	11	1.2	6.8	1.1	2.3	5.8	10.1	18.1	28.2	.3	1.3	7.5
FULTON . . . . .	1 012	379	56.6	527.7	37.6	75.7	305.6	1 220.3	1 886.8	3 102.4	56.3	65.3	844.7
GILMER . . . . .	21	9	1.3	7.0	1.2	2.3	5.9	9.9	35.6	45.4	.4	1.2	8.2
GLYNN . . . . .	72	24	5.6	46.4	4.4	8.2	29.7	132.2	135.4	268.7	(D)	5.1	90.5
GORDON . . . . .	94	39	5.6	36.1	4.6	9.3	25.6	92.2	167.9	252.3	8.9	3.9	42.3
GRADY . . . . .	32	8	1.6	7.3	1.4	2.7	6.1	10.4	20.1	30.4	.6	1.3	6.4
GREENE . . . . .	43	10	1.3	7.5	1.1	2.2	5.0	12.0	12.9	24.3	1.1	1.0	5.1
WINNETT . . . . .	128	58	6.5	49.1	4.9	9.5	29.3	73.0	106.8	173.0	44.4	(D)	(D)
HABERSHAM . . . . .	39	18	3.5	19.8	2.9	6.2	15.5	36.8	48.7	84.8	3.3	3.0	22.7
HALL . . . . .	109	41	8.4	51.0	7.3	14.8	39.4	118.2	271.0	389.5	5.6	9.4	88.3
HANCOCK . . . . .	31	3	.5	1.9	.4	.8	1.6	2.5	1.9	4.5	.2	.5	2.6
HARALSON . . . . .	30	19	6.2	43.0	5.4	10.3	30.6	70.5	96.8	167.6	2.3	5.4	46.6
HARRIS . . . . .	29	2	.3	1.6	.2	.4	1.2	2.5	2.4	4.7	(D)	.2	1.4
HART . . . . .	24	12	2.8	16.4	2.5	4.7	13.4	57.1	32.2	89.2	.6	2.5	33.9
HENRY . . . . .	30	7	1.9	14.0	1.6	3.2	9.1	35.6	39.8	74.5	2.5	1.2	14.0
IRWIN . . . . .	14	3	.4	2.1	.3	.6	1.6	4.8	4.9	9.7	.3	.1	.9
JACKSON . . . . .	24	12	2.9	16.1	2.5	4.8	12.8	36.8	39.8	76.2	1.2	3.3	27.0
JASPER . . . . .	26	7	.9	5.5	.8	1.5	4.6	16.8	22.6	39.1	(D)	.3	1.6

See footnotes at end of table.



TABLE 2. General Statistics for the State, Standard Metropolitan Statistical Areas, and Counties: 1972 and 1967—Continued

(See appendix, Explanation of Terms)

State, standard metropolitan statistical areas, and counties <sup>1</sup>	1972											1967	
	Establishments		All employees <sup>2</sup>		Production workers			Value added by manufac- ture	Cost of materials <sup>3</sup>	Value of shipments <sup>3</sup>	Capital expendi- tures, new	All employees	Value added by manufac- ture
	Total	With 20 employees or more	Number	Payroll	Number	Man-hours	Wages						
	(number)	(number)	(1,000)	(million dollars)	(1,000)	(million)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(1,000)	(million dollars)
COUNTIES—CONTINUED													
JEFF DAVIS . . . . .	25	11	2.7	16.3	2.3	4.8	12.9	47.4	26.8	74.4	5.1	1.7	17.0
JEFFERSON . . . . .	37	11	1.5	7.5	1.3	2.5	6.0	13.7	10.2	23.7	1.4	1.1	6.7
JENKINS . . . . .	19	5	.8	3.9	.7	1.1	2.7	11.0	6.7	17.6	.2	.4	3.0
JOHNSON . . . . .	23	6	1.0	4.5	.9	1.6	3.7	7.3	8.5	15.6	.4	.6	2.9
LAURENS . . . . .	66	19	4.6	26.8	3.9	8.3	20.5	60.4	65.9	122.6	2.0	3.2	31.5
LIBERTY . . . . .	27	4	.3	1.9	.2	.5	1.4	4.2	3.8	7.9	.4	.2	1.7
LINCOLN . . . . .	30	5	.3	1.6	.3	.6	1.3	4.3	4.1	8.4	.4	.3	2.7
LOWNDES . . . . .	87	34	4.7	31.4	4.1	8.2	25.0	89.3	152.1	235.8	8.6	3.8	55.5
MC DUFFIE . . . . .	23	8	2.6	15.4	2.1	4.1	10.6	47.3	58.2	103.7	.7	1.9	24.1
MC INTOSH . . . . .	16	2	.5	2.3	.5	.7	2.0	3.8	5.7	9.3	.3	.5	4.5
MACON . . . . .	14	6	1.4	7.1	1.2	2.7	5.4	12.5	28.2	41.2	.6	.9	7.4
MADISON . . . . .	22	5	1.1	5.2	.9	1.3	4.1	9.0	2.4	11.4	.2	.6	3.3
MERIWETHER . . . . .	37	11	3.1	16.3	2.9	5.8	14.5	43.2	35.3	76.6	1.9	2.9	23.5
MITCHELL . . . . .	47	14	1.3	6.4	1.1	2.2	5.1	10.4	11.0	21.5	.6	1.4	10.8
MONROE . . . . .	34	9	2.2	10.5	2.0	3.9	8.7	21.2	64.0	83.6	2.9	1.4	7.4
MONTGOMERY . . . . .	20	4	.5	2.6	.4	.9	2.3	5.2	4.6	9.7	.3	.4	1.7
MORGAN . . . . .	23	6	.7	3.5	.6	1.1	3.0	8.7	7.1	15.8	.6	.7	4.6
MURRAY . . . . .	49	16	1.7	10.1	1.5	3.3	8.0	32.0	46.8	78.2	2.2	.7	5.0
NEWTON . . . . .	30	13	3.0	19.2	2.5	5.0	14.4	44.2	36.8	78.5	2.7	3.3	18.2
PICKENS . . . . .	17	6	1.4	7.5	1.3	2.6	6.8	11.2	8.4	19.6	.5	1.2	8.9
PIERCE . . . . .	26	4	.4	1.4	.3	.5	1.1	2.9	5.1	8.0	.2	.4	2.4
POLK . . . . .	43	18	3.7	25.5	3.2	6.7	20.9	58.5	86.5	144.2	2.7	3.9	43.7
PULASKI . . . . .	14	4	.5	2.6	.5	1.0	2.2	4.9	5.8	10.6	.2	.8	4.1
PUTNAM . . . . .	12	5	1.2	7.0	1.1	2.2	6.0	16.9	18.8	35.1	.3	1.3	9.1
RANDOLPH . . . . .	24	8	.6	2.8	.5	.9	1.9	8.1	8.6	16.9	.3	.5	3.0
RICHMOND . . . . .	151	72	13.3	98.7	9.8	20.0	61.6	251.2	307.9	557.6	14.6	13.2	180.8
ROCKDALE . . . . .	34	20	2.5	18.3	1.9	3.9	12.3	46.9	66.4	112.7	4.2	2.0	24.9
SCREVEN . . . . .	36	5	1.2	7.2	1.0	2.5	5.9	15.1	9.2	24.3	2.1	.6	6.8
SPALDING . . . . .	54	23	6.9	37.0	6.0	11.2	28.2	58.8	63.3	119.9	8.0	7.0	42.7
STEPHENS . . . . .	41	21	5.3	31.7	4.7	9.1	25.1	51.2	91.5	138.4	13.7	5.1	37.1
STEWART . . . . .	14	5	.5	3.5	.4	.9	2.6	9.5	15.9	25.6	.4	.3	2.2
SUMTER . . . . .	55	23	3.7	21.3	3.1	6.1	16.5	46.7	78.6	124.7	(D)	2.5	24.3
TATTNALL . . . . .	33	3	.4	1.6	.4	.6	1.4	2.0	1.3	3.3	.2	.5	3.8
TELFAR . . . . .	30	6	1.0	4.6	.9	1.5	3.6	17.0	25.1	34.4	3.3	.9	4.8
THOMAS . . . . .	60	23	3.5	22.4	2.7	5.5	14.4	34.5	92.0	127.4	3.4	3.0	31.4
TIFT . . . . .	54	24	3.5	19.6	2.9	5.8	14.6	51.0	74.9	121.6	3.0	2.0	17.8
TOOMBS . . . . .	56	15	2.8	13.0	2.5	4.6	10.4	24.5	15.7	40.0	.7	2.4	12.5
TROUP . . . . .	77	31	7.3	52.4	5.4	11.5	32.2	71.8	124.5	196.4	9.0	8.7	75.3
TURNER . . . . .	12	5	.8	4.1	.7	1.2	3.4	11.7	13.3	24.6	.2	.3	1.9
UPSON . . . . .	26	8	5.2	31.8	4.7	10.1	26.8	65.3	95.1	162.3	4.1	4.9	46.5
WALKER . . . . .	70	34	8.4	56.4	7.3	15.8	44.9	122.0	162.7	282.2	10.2	7.1	68.8
WALTON . . . . .	34	21	3.6	18.5	3.3	6.4	15.7	36.6	42.2	79.0	4.6	3.7	26.5
WARE . . . . .	83	28	3.2	17.3	2.8	5.2	12.8	33.6	45.9	80.1	1.7	2.4	23.0
WASHINGTON . . . . .	56	14	1.4	8.6	1.3	2.6	6.8	18.7	22.7	39.7	1.4	.8	6.3
WAYNE . . . . .	41	10	1.7	13.1	1.5	2.8	10.8	24.8	33.8	59.3	(D)	1.7	23.4
WHEELER . . . . .	22	1	.3	1.3	.3	.5	1.1	2.4	2.6	5.0	.1	.3	1.1
WHITE . . . . .	30	6	1.0	5.2	.9	1.7	4.5	16.1	22.0	38.0	.5	(D)	(D)
WHITFIELD . . . . .	292	117	19.1	134.5	15.4	32.1	93.5	312.9	619.5	925.8	20.1	14.5	165.6
WILCOX . . . . .	16	1	.3	1.0	.3	.4	1.0	1.5	.7	2.2	(2)	.3	1.3
WILKES . . . . .	44	11	1.5	8.0	1.2	2.2	5.4	16.0	27.1	42.2	.9	1.3	8.7
WORTH . . . . .	20	5	.6	3.4	.6	1.1	2.7	7.3	16.6	22.7	.3	.3	2.8

(N) Withheld to avoid disclosing figures for individual companies. (Z) Less than half of the unit of measurement shown.

<sup>1</sup>Some counties were withheld from publication in order to (a) avoid disclosing figures for individual companies or (b) permit further checking of the figures for smaller counties.

Additional detail will appear in the final report for this State.

<sup>2</sup>Includes employment and payroll at central administrative offices and auxiliary units. (For a definition of these units, see appendix.)<sup>3</sup>The total cost of materials and value of shipments may include extensive duplication arising from shipments between establishments in the same industry classification. (For a more complete explanation, see appendix.)<sup>4</sup>The standard metropolitan statistical areas in this State are defined as follows:

ALBANY SMSA: Consists of Dougherty and Lee Counties, GA.

ATLANTA SMSA: Butts, Cherokee, Clayton, Cobb, De Kalb, Douglas, Fayette, Forsyth, Fulton, Gwinnett, Henry, Newton, Paulding, Rockdale, and Walton Counties, GA.

AUGUSTA, GA-SC, SMSA: Consists of Columbia and Richmond Counties, GA, and Aiken County, SC.

CHATTANOOGA, TN-GA, SMSA: Consists of Hamilton, Marion, and Sequatchie Counties, TN, and Catoosa, Dade, and Walker Counties, GA.

COLUMBUS, GA-AL, SMSA: Consists of Chattahoochee and Muscogee Counties, GA, and Russell County, AL.

MACON SMSA: Consists of Bibb, Houston, Jones, and Twiggs Counties, GA.

SAVANNAH SMSA: Consists of Bryan, Chatham, and Effingham Counties, GA.

TABLE 3. General Statistics for the State, by Industry Groups and Industries: 1972 and 1967

(See appendix, Explanation of Terms)

Code	Industry	1972											1967	
		Establishments		All employees		Production workers			Value added by manufacture	Cost of materials <sup>1</sup>	Value of shipments <sup>1</sup>	Capital expenditures, 1967	All employees	Value added by manufacture
		Total	With 20 employees or more	Number	Payroll	Number	Man-hours	Wages						
		(number)	(number)	(1,000)	(million dollars)	(1,000)	(million)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(1,000)	(million dollars)
	ALL INDUSTRIES, TOTAL <sup>2</sup> . . . . .	7 540	2 619	462.5	3 296.4	364.8	731.5	2 227.5	7 362.2	10 967.6	18 276.6	632.5	423.1	4 683.6
20	FOOD AND KINDRED PRODUCTS. . . . .	661	293	45.4	305.6	32.0	64.8	182.3	822.1	1 799.0	2 612.3	56.2	45.7	557.4
201	MEAT PRODUCTS. . . . .	148	67	13.3	74.9	11.2	22.5	56.1	131.9	528.9	661.6	13.3	13.6	98.4
2011	MEATPACKING PLANTS. . . . .	83	26	3.5	23.6	2.5	5.5	15.1	39.8	224.9	263.9	3.3	3.2	29.5
2013	SAUSAGES AND OTHER PREPARED MEATS. . . . .	31	12	1.0	6.4	.7	1.2	3.6	13.7	54.5	68.3	1.6	.5	6.6
2016	POULTRY DRESSING PLANTS. . . . .	27	27	8.7	43.9	7.8	15.4	36.6	76.3	238.8	316.2	8.3	(NA)	(NA)
202	DAIRY PRODUCTS. . . . .	48	23	3.1	25.3	1.5	3.0	10.9	54.3	181.0	234.0	2.8	3.5	38.3
2026	FLUID MILK. . . . .	35	17	2.1	16.1	.8	1.5	4.6	38.1	78.7	116.8	1.1	FF	(D)
203	PRESERVED FRUITS AND VEGETABLES. . . . .	33	18	3.5	18.0	3.0	6.1	13.1	36.3	66.9	103.6	3.6	(NA)	(NA)
2033	CANNED FRUITS AND VEGETABLES. . . . .	12	7	1.3	5.5	1.1	2.0	4.3	10.7	21.2	32.2	.7	EE	(D)
2038	FROZEN SPECIALTIES. . . . .	9	5	.6	4.4	.5	.9	2.7	12.2	14.6	26.8	2.1	(NA)	(NA)
204	GRAIN MILL PRODUCTS. . . . .	120	28	2.4	17.9	1.6	3.3	9.7	57.8	251.8	308.6	3.6	2.0	40.5
205	BAKERY PRODUCTS. . . . .	60	35	8.2	65.7	5.7	11.6	39.9	172.2	141.0	313.1	(D)	7.7	119.8
2051	BREAD, CAKE, AND RELATED PRODUCTS. . . . .	50	27	4.5	37.8	2.6	5.7	17.1	74.8	62.4	137.3	6.5	4.6	60.7
206	SUGAR AND CONFECTIONERY PRODUCTS. . . . .	22	12	3.6	27.1	2.9	6.3	17.6	81.4	182.7	262.8	5.9	(NA)	(NA)
207	FATS AND OILS. . . . .	24	18	1.2	9.2	.9	2.0	6.0	45.0	196.4	234.4	6.3	(NA)	(NA)
2079	SHORTENING AND COOKING OILS. . . . .	5	5	.5	4.4	.4	.9	3.0	14.8	69.1	84.7	3.2	.6	14.4
208	BEVERAGES. . . . .	96	64	5.5	43.9	1.9	4.0	13.7	165.3	157.1	323.9	5.7	5.5	108.8
2086	BOTTLED AND CANNED SOFT DRINKS. . . . .	74	56	4.3	31.1	1.4	2.9	8.0	60.3	72.6	134.5	5.1	4.5	49.0
209	MISC. FOODS AND KINDRED PRODUCTS. . . . .	110	28	4.3	23.6	3.2	5.6	14.7	78.0	93.2	170.5	2.5	(NA)	(NA)
2092	FRESH OR FROZEN PACKAGED FISH. . . . .	15	7	1.5	6.2	1.3	2.3	4.3	12.3	33.1	45.3	.8	2.3	9.9
2099	FOOD PREPARATIONS, NEC. . . . .	49	20	2.5	16.0	1.7	3.0	9.6	60.4	56.0	115.8	1.5	2.5	30.6
22	TEXTILE MILL PRODUCTS. . . . .	536	364	110.0	694.5	97.1	205.3	562.6	1 541.6	2 430.3	3 942.8	120.4	109.2	990.6
2211	WEAVING MILLS, COTTON. . . . .	49	45	27.1	162.8	24.9	53.2	141.4	312.8	293.6	617.0	16.5	FF	(D)
225	KNITTING MILLS. . . . .	36	26	5.4	28.8	4.9	9.3	24.1	49.8	85.6	133.5	14.1	8.3	47.5
2252	HOSIERY, NEC. . . . .	18	13	1.9	9.0	1.7	3.1	7.6	12.9	14.5	27.1	.5	2.2	10.0
226	TEXTILE FINISHING, EXCEPT WOOL. . . . .	24	19	4.3	26.8	3.7	8.1	20.7	46.2	56.4	101.6	6.7	FF	(D)
2261	FINISHING PLANTS, COTTON. . . . .	6	6	1.9	11.2	1.7	3.4	9.0	18.1	23.7	41.4	(D)	2.3	17.9
227	FLOOR COVERING MILLS. . . . .	241	142	30.0	202.8	24.4	49.5	143.1	577.5	1 158.1	1 708.7	34.1	19.1	276.0
228	YARN AND THREAD MILLS. . . . .	101	83	21.7	130.8	19.9	41.7	113.3	245.3	397.3	635.5	26.4	16.9	123.0
229	MISCELLANEOUS TEXTILE GOODS. . . . .	57	26	7.6	49.7	6.8	15.1	42.6	99.7	247.6	347.1	7.7	5.7	50.7
2296	TIRE CORD AND FABRIC. . . . .	6	6	5.0	34.5	4.6	9.8	30.3	66.8	213.0	280.0	4.9	4.7	43.4
23	APPAREL, OTHER TEXTILE PRODUCTS. . . . .	526	395	74.6	350.8	65.8	122.1	271.5	640.6	739.2	1 373.2	23.9	66.5	413.3
232	MEN'S AND BOYS' FURNISHINGS. . . . .	156	150	33.3	149.3	29.6	53.8	117.8	263.6	332.4	594.0	6.1	32.4	176.8
2321	MEN'S AND BOYS' SHIRTS AND NIGHTWEAR. . . . .	39	34	12.4	59.1	10.8	19.7	44.1	111.6	180.7	293.2	2.1	11.6	72.0
2327	MEN'S AND BOYS' SEPARATE TROUSERS. . . . .	54	52	10.9	49.4	9.7	17.6	39.3	76.0	77.0	150.8	2.1	11.7	58.2
2328	MEN'S AND BOYS' WORK CLOTHING. . . . .	37	36	7.1	29.0	6.4	11.7	24.3	57.4	59.5	116.3	1.5	7.0	36.8
233	WOMEN'S, AND MISSES' OUTERWEAR. . . . .	103	83	8.3	36.7	7.4	13.2	28.4	59.0	42.6	102.4	1.9	6.5	36.6
2335	WOMEN'S AND MISSES' DRESSES. . . . .	44	31	3.0	11.7	2.6	4.6	9.5	16.3	5.6	22.1	.4	2.5	12.3
2339	WOMEN'S, MISSES' OUTERWEAR, NEC. . . . .	29	27	2.7	13.0	2.4	4.4	10.0	21.0	20.4	41.8	.9	1.8	9.6
234	WOMEN'S, CHILDREN'S UNDERGARMENTS. . . . .	34	32	10.8	51.3	9.6	17.9	40.6	110.9	73.3	179.4	3.2	8.3	68.0
2341	WOMEN'S AND CHILDREN'S UNDERWEAR. . . . .	22	21	6.4	26.8	6.0	10.6	22.6	48.3	32.3	79.6	2.2	3.7	19.1
2342	BRASSIERES AND ALLIED GARMENTS. . . . .	12	11	4.4	24.5	3.6	7.3	18.0	62.6	41.0	99.8	1.0	4.5	48.9
236	CHILDREN'S OUTERWEAR. . . . .	20	18	2.3	9.7	2.0	3.7	7.6	15.3	10.8	26.1	.2	2.7	17.2
2369	CHILDREN'S OUTERWEAR, NEC. . . . .	13	11	1.2	4.9	1.0	1.9	3.7	7.6	5.1	12.4	.1	1.4	8.0
2385	WATERPROOF OUTER GARMENTS. . . . .	7	6	.9	4.6	.8	1.3	2.7	6.7	6.8	12.4	.1	1.0	5.0
239	MISC. FABRICATED TEXTILE PRODUCTS. . . . .	168	77	10.3	53.0	8.6	17.0	38.8	113.3	210.8	322.8	10.2	7.7	59.2
2391	CURTAINS AND DRAPERIES. . . . .	36	16	1.6	7.2	1.4	2.7	5.4	11.2	13.6	24.6	.3	1.4	5.8
2392	HOUSE FURNISHINGS, NEC. . . . .	59	27	4.7	23.8	4.0	8.1	18.0	51.2	116.9	167.4	4.9	4.2	28.3
2399	FABRICATED TEXTILE PRODUCTS, NEC. . . . .	34	18	2.5	14.3	2.1	4.0	10.0	30.7	45.0	76.3	4.3	1.2	11.3
24	LUMBER AND WOOD PRODUCTS. . . . .	2 117	256	26.9	161.5	23.5	45.6	125.1	357.4	542.1	893.2	34.9	(NA)	(NA)
2411	LOGGING CAMPS, LOGGING CONTRACTORS. . . . .	1 341	14	4.4	20.1	4.0	7.0	17.3	45.2	53.0	98.0	6.0	4.4	31.4
242	SAWMILLS AND PLANING MILLS. . . . .	435	100	7.2	39.1	6.5	12.4	32.0	94.9	127.6	221.0	14.0	7.9	51.5
2421	SAWMILLS AND PLANING MILLS, GENERAL. . . . .	412	90	6.5	35.9	5.9	11.3	29.5	90.2	123.0	211.6	13.6	7.0	46.4
2426	HARDWOOD DIMENSION AND FLOORING. . . . .	15	7	.6	2.6	.5	.9	2.0	3.8	3.7	7.5	.3	(NA)	(NA)
243	MILLWORK, PLYWOOD, STRUC. MEMBERS. . . . .	155	38	4.0	25.8	3.4	6.9	20.1	59.6	74.2	132.8	6.7	(NA)	(NA)
2436	SOFTWOOD VENEER AND PLYWOOD. . . . .	4	4	1.0	7.7	.9	2.1	6.7	22.3	25.0	47.4	4.5	(NA)	(NA)
244	WOOD CONTAINERS. . . . .	29	19	1.9	9.3	1.8	3.5	7.6	16.6	18.0	34.7	.7	(NA)	(NA)
2441	NAILED WOOD BOXES AND SHOOK. . . . .	10	5	.5	2.5	.5	.9	2.0	4.0	3.7	7.8	.1	BB	(D)
2448	WOOD PALLETS AND SKIDS. . . . .	10	8	.3	1.4	.3	.5	1.1	2.7	2.8	5.5	.3	(NA)	(NA)
2449	WOOD CONTAINERS, NEC. . . . .	9	6	1.1	5.4	1.0	2.0	4.5	9.9	11.5	21.4	.3	(NA)	(NA)
245	WOOD BUILDINGS AND MOBILE HOMES. . . . .	63	60	7.5	55.3	6.2	12.6	40.3	108.1	235.0	340.7	5.4	(NA)	(NA)
2451	MOBILE HOMES. . . . .	50	47	6.4	47.3	5.4	11.3	36.2	92.3	211.8	302.0	4.4	(NA)	(NA)
2452	PREFABRICATED WOOD BUILDINGS. . . . .	11	11	1.1	8.0	.8	1.3	4.1	15.7	23.2	38.7	1.0	(NA)	(NA)

See footnotes at end of table.



TABLE 3. General Statistics for the State, by Industry Groups and Industries: 1972 and 1967—Continued

(See appendix, Explanation of Terms)

Code	Industry	1972											1967	
		Establishments		All employees		Production workers			Value added by manufacture	Cost of materials <sup>1</sup>	Value of shipments <sup>1</sup>	Capital expenditures, new <sup>2</sup>	All employees	Value added by manufacture
		Total	With 20 employees or more	Number	Payroll	Number	Man-hours	Wages						
		(number)	(number)	(1,000)	(million dollars)	(1,000)	(million)	(million dollars)					(1,000)	(million dollars)
249	MISCELLANEOUS WOOD PRODUCTS. . . . .	94	25	2.0	12.0	1.6	3.3	8.4	32.9	34.3	66.0	2.0	(NA)	(NA)
25	FURNITURE AND FIXTURES. . . . .	235	90	11.0	67.3	9.4	18.1	48.7	131.7	130.7	259.5	7.1	9.3	73.9
251	HOUSEHOLD FURNITURE. . . . .	158	62	9.1	53.9	7.8	15.0	39.2	105.3	113.1	215.4	5.8	(NA)	(NA)
2511	WOOD HOUSEHOLD FURNITURE. . . . .	94	32	4.1	21.7	3.6	7.2	17.0	42.8	41.5	82.1	(D)	(NA)	(NA)
2512	UPHOLSTERED HOUSEHOLD FURNITURE. . . . .	23	16	2.3	15.8	2.0	3.7	10.8	27.2	29.1	55.5	(D)	(NA)	(NA)
2515	MATTRESSES AND BEDSPRINGS. . . . .	29	9	1.5	10.9	1.2	2.5	7.3	22.0	29.3	51.5	.8	EE	(D)
254	PARTITIONS AND FIXTURES. . . . .	44	14	1.0	7.2	.8	1.5	4.9	13.9	9.5	23.9	.8	.6	5.5
2541	WOOD PARTITIONS AND FIXTURES. . . . .	35	9	.7	5.4	.6	1.1	3.6	11.2	7.1	17.8	.3	.5	4.5
2542	METAL PARTITIONS AND FIXTURES. . . . .	9	5	.3	1.9	.2	.4	1.4	2.7	2.4	6.1	.5	(NA)	(NA)
259	MISC. FURNITURE AND FIXTURES. . . . .	25	11	.7	4.6	.5	1.1	3.3	9.0	5.8	14.5	.3	.3	3.6
26	PAPER AND ALLIED PRODUCTS. . . . .	132	91	23.9	229.3	19.0	39.7	168.6	604.4	673.9	1 276.7	167.7	22.8	436.7
2631	PAPERBOARD MILLS. . . . .	12	12	7.3	85.1	5.7	12.3	61.1	263.0	281.9	545.6	92.0	6.5	187.3
264	MISC. CONVERTED PAPER PRODUCTS. . . . .	44	28	5.9	47.0	4.9	9.8	36.4	124.6	119.3	241.8	4.5	5.5	62.7
2642	ENVELOPES. . . . .	6	5	.5	4.5	.4	.8	3.0	9.1	6.4	15.3	.4	CC	(D)
2643	BAGS, EXCEPT TEXTILE BAGS. . . . .	15	10	4.2	34.1	3.6	7.2	27.8	90.4	86.8	176.4	3.7	3.4	34.1
265	PAPERBOARD CONTAINERS AND BOXES. . . . .	67	46	7.1	59.7	5.5	11.3	41.0	124.6	163.8	287.5	4.7	6.6	80.8
2651	FOLDING PAPERBOARD BOXES. . . . .	5	5	1.8	15.6	1.2	2.4	9.4	36.8	34.8	70.9	.5	1.7	20.2
2653	CORRUGATED AND SOLID FIBER BOXES. . . . .	30	20	3.0	26.2	2.4	4.9	18.4	45.4	79.3	124.6	2.1	2.6	28.5
2654	SANITARY FOOD CONTAINERS. . . . .	5	5	1.2	9.3	1.0	1.9	7.1	26.8	27.9	54.5	.9	1.6	26.1
2655	FIBER CANS, DRUMS, SIMILAR PRODUCTS. . . . .	14	9	.9	7.3	.7	1.6	5.3	13.9	20.4	34.3	1.2	.4	4.2
27	PRINTING AND PUBLISHING. . . . .	744	143	14.8	127.9	9.8	19.4	80.5	250.1	131.0	381.1	12.7	12.7	153.7
2711	NEWSPAPERS. . . . .	171	34	5.4	44.2	2.7	5.3	23.0	102.1	36.8	138.9	5.6	5.0	60.2
2721	PERIODICALS. . . . .	36	3	.4	3.9	.1	.2	1.0	8.1	3.9	12.1	.2	.4	8.7
275	COMMERCIAL PRINTING. . . . .	413	71	6.6	61.4	5.1	10.0	43.9	105.2	73.5	178.2	4.9	(NA)	(NA)
2751	COMMERCIAL PRINTING, LITHOGRAPHIC. . . . .	257	24	2.6	20.7	2.0	3.9	14.8	40.6	36.7	76.8	2.4	(NA)	(NA)
2752	COMMERCIAL PRINTING, LITHOGRAPHIC. . . . .	149	45	3.9	39.8	3.0	5.9	28.4	63.2	36.1	99.3	2.5	(NA)	(NA)
278	BLANKBOOKS AND BOOKBINDING. . . . .	25	12	1.1	6.6	1.0	2.0	5.1	12.9	7.0	20.5	.7	.8	7.6
2782	BLANKBOOKS AND LOOSELEAF BINDERS. . . . .	11	7	.4	2.5	.3	.7	2.0	4.3	2.9	7.4	.1	.5	5.2
2789	BOOKBINDING AND RELATED WORK. . . . .	14	5	.7	4.1	.7	1.4	3.1	8.6	4.1	13.1	.6	.3	2.4
279	PRINTING TRADE SERVICES. . . . .	39	7	.4	4.0	.3	.5	2.7	6.2	1.1	7.2	.3	(NA)	(NA)
28	CHEMICALS AND ALLIED PRODUCTS. . . . .	298	128	14.3	128.6	8.5	17.3	62.2	525.0	525.5	1 030.5	31.5	11.7	308.1
281	INDUSTRIAL INORGANIC CHEMICALS. . . . .	28	12	1.4	14.4	1.0	2.3	9.3	58.2	71.9	131.5	5.2	(NA)	(NA)
2812	ALKALIES AND CHLORINE. . . . .	3	3	.3	3.0	.2	.4	2.0	12.4	13.8	26.2	1.6	AA	(D)
2816	INORGANIC PIGMENTS. . . . .	6	2	.7	6.8	.5	1.2	4.6	28.1	29.9	59.2	1.9	CC	(D)
282	PLASTICS MATERIALS AND SYNTHETICS. . . . .	12	9	1.8	13.7	1.3	2.6	8.8	46.3	37.6	82.8	(D)	(NA)	(NA)
283	DRUGS. . . . .	18	5	1.0	7.8	.7	1.4	4.5	45.9	19.4	64.9	5.4	CC	(D)
284	SOAPS, CLEANERS, AND TOILET GOODS. . . . .	61	30	3.2	31.4	1.4	2.6	10.1	175.3	105.1	277.3	4.2	(NA)	(NA)
2841	SOAP AND OTHER DETERGENTS. . . . .	18	11	1.2	12.1	.5	1.0	4.1	89.1	52.1	139.6	2.6	.8	48.0
2842	POLISHES AND SANITATION GOODS. . . . .	31	14	1.6	15.8	.6	1.1	4.3	71.0	39.3	108.5	1.3	(NA)	(NA)
2843	SURFACE ACTIVE AGENTS. . . . .	3	3	.3	2.7	.2	.4	1.4	12.0	11.9	24.1	.3	EE	(D)
2851	PAINTS AND ALLIED PRODUCTS. . . . .	37	17	1.6	15.5	.8	1.7	6.2	57.8	74.8	130.7	(D)	1.2	28.1
286	INDUSTRIAL ORGANIC CHEMICALS. . . . .	19	7	1.4	13.9	1.0	2.0	8.6	50.7	51.2	104.9	2.7	(NA)	(NA)
287	AGRICULTURAL CHEMICALS. . . . .	61	28	2.3	17.2	1.4	2.9	8.8	42.5	98.7	121.7	2.7	(NA)	(NA)
2874	PHOSPHATIC FERTILIZERS. . . . .	11	9	.7	4.5	.5	1.0	2.8	11.1	31.4	43.0	.6	(NA)	(NA)
2875	FERTILIZERS, MIXING ONLY. . . . .	35	12	.6	3.4	.4	.8	2.1	10.1	22.7	33.0	.6	.7	5.7
289	MISCELLANEOUS CHEMICAL PRODUCTS. . . . .	62	20	1.5	14.7	.9	1.8	5.9	48.4	66.8	116.7	(D)	(NA)	(NA)
29	PETROLEUM AND COAL PRODUCTS. . . . .	44	15	1.3	11.2	1.0	2.2	7.7	42.8	70.6	112.7	1.8	.9	15.2
295	PAVING AND ROOFING MATERIALS. . . . .	32	10	1.0	8.7	.8	1.8	6.4	32.4	44.4	76.8	1.2	.6	10.6
2951	PAVING MIXTURES AND BLOCKS. . . . .	26	5	.5	3.6	.3	.7	2.3	10.0	17.2	27.2	.8	.2	1.6
2952	ASPHALT FELTS AND COATINGS. . . . .	6	5	.6	5.1	.5	1.0	4.1	22.4	27.2	49.6	.4	.5	9.0
30	RUBBER AND MISC. PLASTICS PROD. . . . .	152	75	10.0	66.5	8.4	16.6	48.1	207.4	190.6	395.7	16.6	(NA)	(NA)
3079	MISCELLANEOUS PLASTICS PRODUCTS. . . . .	108	46	3.4	22.7	2.9	5.7	15.5	58.8	53.2	110.7	12.2	(NA)	(NA)
31	LEATHER AND LEATHER PRODUCTS. . . . .	28	18	4.4	19.5	4.0	7.2	16.5	38.1	40.1	77.4	.9	4.6	32.2
314	FOOTWEAR, EXCEPT RUBBER. . . . .	12	11	3.4	15.4	3.1	5.8	13.3	31.4	30.8	61.4	.7	3.6	24.8
3143	MEN'S FOOTWEAR, EXCEPT ATHLETIC. . . . .	7	6	2.3	10.9	2.2	4.1	10.0	20.1	22.9	42.3	.6	(NA)	(NA)
32	STONE, CLAY, AND GLASS PRODUCTS. . . . .	437	173	16.3	124.0	12.7	26.0	86.5	290.6	227.5	513.5	46.5	13.8	158.4
325	STRUCTURAL CLAY PRODUCTS. . . . .	17	14	3.8	28.0	3.0	6.1	18.6	61.5	31.5	93.7	6.2	3.2	30.3
3251	BRICK AND STRUCTURAL CLAY TILE. . . . .	11	8	2.3	16.4	1.9	4.0	11.7	35.6	17.3	53.5	5.0	EE	(D)
327	CONCRETE, GYPSUM, PLASTER PRODUCTS. . . . .	265	95	6.2	47.0	4.2	8.9	29.4	110.9	124.0	233.2	18.8	5.4	62.7
3272	CONCRETE PRODUCTS, NEC. . . . .	115	29	1.8	14.2	1.5	3.0	9.4	29.3	18.5	46.5	2.3	1.9	18.2
3273	READY-MIXED CONCRETE. . . . .	102	39	2.7	18.5	1.6	3.2	10.1	42.0	63.6	105.5	7.6	2.3	24.9
3275	GYPSUM PRODUCTS. . . . .	5	4	.5	5.8	.4	1.1	4.8	17.2	18.8	35.9	.3	.5	11.4

See footnotes at end of table.

TABLE 3. General Statistics for the State, by Industry Groups and Industries: 1972 and 1967—Continued

(See appendix, Explanation of Terms)

Code	Industry	1972										1967		
		Establishments		All employees		Production workers			Value added by manufacture	Cost of materials <sup>1</sup>	Value of shipments <sup>1</sup>	Capital expenditures, new	All employees	Value added by manufacture
		Total	With 20 employees or more	Number	Payroll	Number	Man-hours	Wages						
		(number)	(number)	(1,000)	(million dollars)	(1,000)	(million)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(1,000)	(million dollars)
3281	CUT STONE AND STONE PRODUCTS . . . .	93	31	2.2	14.1	1.9	3.9	11.5	24.2	14.1	37.5	.8	2,2	17.7
329	MISC. NONMETALLIC MINERAL PRODUCTS	30	16	1.4	11.1	1.2	2.4	7.3	31.2	22.7	52.9	3.5	(NA)	(NA)
3295	MINERALS, GROUND OR TREATED. . . . .	7	8	.3	2.6	.3	.6	1.5	7.9	5.6	13.3	.9	.4	4.9
33	PRIMARY METAL INDUSTRIES . . . . .	73	46	11.0	90.6	8.5	18.2	62.9	129.4	348.6	486.6	46.1	5.7	75.7
331	BLAST FURNACE, BASIC STEEL PROD. . .	11	7	2.0	20.0	1.6	3.4	15.2	26.0	56.9	83.3	.7	2.0	19.8
332	IRON AND STEEL FOUNDRIES . . . . .	22	17	2.2	14.0	1.9	3.7	10.9	19.9	10.9	30.5	2.3	.9	6.6
3321	GRAY IRON FOUNDRIES. . . . .	16	11	1.3	8.8	1.1	2.3	6.9	13.4	7.2	20.4	1.3	.6	4.3
335	NONFERROUS ROLLING AND DRAWING . .	20	17	6.3	53.7	4.7	10.4	34.6	76.8	268.1	353.5	42.8	2.2	40.6
3354	ALUMINUM EXTRUDED PRODUCTS . . . . .	7	6	2.2	15.3	1.8	4.1	11.6	36.4	43.9	78.8	(D)	(NA)	(NA)
3357	NONFERROUS WIRE DRAWING, INSULATING.	8	7	4.0	37.5	2.8	6.1	22.3	37.3	212.8	260.2	(D)	EE	(D)
34	FABRICATED METAL PRODUCTS. . . . .	372	167	18.4	131.8	14.8	28.6	94.3	298.1	353.1	645.5	20.3	(NA)	(NA)
341	METAL CANS AND SHIPPING CONTAINERS	19	11	1.9	17.3	1.7	3.6	14.7	42.2	71.2	113.1	4.8	(NA)	(NA)
342	CUTLERY, HANDTOOLS AND HARDWARE. .	10	3	.3	1.8	.2	.4	1.3	4.8	3.5	8.3	.6	BB	(D)
343	PLUMBING, HEATING, EXC. ELECTRIC. .	11	6	.9	6.2	.7	1.3	3.5	14.9	14.1	28.4	1.6	(NA)	(NA)
344	FABRICATED STRUCTURAL METAL PROD. .	222	104	9.8	71.9	7.6	14.7	48.6	164.3	190.9	351.8	9.1	8.2	84.8
3441	FABRICATED STRUCTURAL METAL PRODUCTS	42	18	1.4	10.9	1.1	2.3	7.4	19.8	30.0	49.8	1.7	1.2	11.1
3442	METAL DOORS, SASH, AND TRIM. . . . .	33	19	3.2	21.0	2.4	4.7	13.6	40.7	48.5	88.1	4.2	3.2	29.0
3443	FABRICATED PLATEWORK (BOILERS SHOP).	16	12	1.7	12.8	1.4	2.5	10.4	38.8	18.1	55.8	.6	1.6	19.3
3446	ARCHITECTURAL METALWORK. . . . .	32	11	.5	3.3	.4	.8	2.3	6.9	5.5	12.3	.2	.3	3.4
346	METAL FORGINGS AND STAMPINGS . . . .	21	13	2.6	16.3	2.4	4.4	13.8	31.8	39.8	70.6	1.1	(NA)	(NA)
347	METAL SERVICES, NEC. . . . .	36	11	.7	5.1	.6	1.1	3.6	8.9	6.9	16.0	.7	.7	6.3
3471	PLATING AND POLISHING. . . . .	23	7	.4	3.1	.3	.7	2.2	4.8	2.0	6.9	.5	.5	4.7
3479	METAL COATING AND ALLIED SERVICES. .	13	4	.3	2.0	.2	.4	1.4	4.1	4.9	9.1	.2	.2	1.6
348	ORDNANCE AND ACCESSORIES, NEC. . .	7	7	1.2	7.2	1.0	1.6	4.8	15.1	9.3	24.4	1.7	(NA)	(NA)
349	MISC. FABRICATED METAL PRODUCTS. .	42	14	.8	5.2	.6	1.2	3.3	14.1	16.5	30.1	.7	(NA)	(NA)
3499	FABRICATED METAL PRODUCTS, NEC . . .	24	7	.5	2.9	.3	.7	1.7	6.7	7.0	13.6	.3	(NA)	(NA)
35	MACHINERY, EXCEPT ELECTRICAL. . .	480	113	12.6	102.3	9.4	18.7	64.3	209.5	190.6	386.0	12.6	11.5	135.4
352	FARM AND GARDEN MACHINERY. . . . .	45	16	2.3	16.9	1.8	3.4	10.7	49.2	57.5	98.3	3.1	(NA)	(NA)
353	CONSTRUCTION AND RELATED MACHINERY	26	10	1.5	13.4	1.1	2.2	8.5	24.4	31.7	53.0	.8	1.4	21.7
354	METALWORKING MACHINERY . . . . .	47	14	1.0	8.9	.8	1.8	6.4	18.1	8.0	24.7	1.1	.9	10.3
3544	SPECIAL DIES, TOOLS, JIGS, FIXTURES. .	34	11	.6	5.5	.6	1.2	4.2	9.6	3.5	13.0	.8	.5	6.0
355	SPECIAL INDUSTRY MACHINERY . . . . .	90	30	3.4	28.3	2.4	5.0	16.5	50.6	37.7	87.1	4.1	3.4	35.0
3551	FOOD PRODUCTS MACHINERY. . . . .	22	9	1.1	9.9	.8	1.6	5.9	19.5	12.1	31.0	1.4	1.0	13.8
3559	SPECIAL INDUSTRY MACHINERY, NEC. . .	14	3	.7	5.0	.5	.9	2.3	9.3	7.9	17.1	.6	.6	6.4
356	GENERAL INDUSTRIAL MACHINERY . . .	26	12	1.2	10.1	.8	1.7	6.0	22.5	15.4	37.8	.8	.8	13.3
3569	GENERAL INDUSTRIAL MACHINERY, NEC. .	14	6	.5	4.3	.3	.7	2.3	9.4	7.4	16.5	.2	.4	7.0
358	REFRIGERATION, SERVICE MACHINERY. .	24	9	1.4	10.3	1.0	2.0	6.3	19.9	26.3	44.2	.6	1.4	15.9
359	MISC. MACHINERY, EXCEPT ELECTRICAL	210	17	1.4	10.5	1.1	2.0	7.6	20.2	9.1	29.7	1.4	(NA)	(NA)
36	ELECTRIC, ELECTRONIC EQUIPMENT. . .	110	50	11.8	98.5	8.6	16.7	60.9	230.8	228.6	459.6	11.0	(NA)	(NA)
361	ELECTRIC DISTRIBUTING EQUIPMENT. . .	19	15	5.7	48.3	4.2	8.3	30.5	119.3	92.7	214.0	3.4	(NA)	(NA)
362	ELECTRICAL INDUSTRIAL APPARATUS. . .	11	4	1.2	8.4	.8	1.4	4.8	18.1	16.6	37.4	(D)	AA	(D)
364	ELECT. LIGHTING AND WIRING EQUIP. .	14	11	2.3	19.2	1.5	2.9	10.2	45.1	57.7	101.3	4.4	1.5	22.0
3645	RESIDENTIAL LIGHTING FIXTURES. . . .	6	5	.3	1.7	.2	.4	1.2	3.1	3.9	6.8	.1	(NA)	(NA)
369	MISC. ELECTRICAL EQUIP. & SUPPLIES	20	6	1.1	9.8	1.0	2.0	7.8	26.4	26.5	52.2	1.3	.7	9.4
3691	STORAGE BATTERIES. . . . .	8	5	1.0	9.1	.9	1.8	7.2	24.9	25.1	49.3	1.3	.5	7.9
37	TRANSPORTATION EQUIPMENT . . . . .	154	65	34.0	381.2	24.1	49.4	242.6	901.3	2 245.2	3 193.6	16.3	(NA)	(NA)
3714	MOTOR VEHICLE PARTS AND ACCESSORIES. .	37	19	2.6	16.6	2.3	4.4	13.4	55.0	35.1	89.4	1.0	1.7	30.7
3715	TRUCK TRAILERS . . . . .	5	5	1.0	9.6	.9	1.7	6.3	19.7	39.3	58.0	(D)	CC	(D)
373	SHIP, BOAT BUILDING, REPAIRING . . .	27	6	.8	5.8	.6	1.3	4.7	10.9	8.5	19.2	.1	1.5	14.8
379	MISC. TRANSPORTATION EQUIPMENT . . .	44	15	.9	5.5	.7	1.4	4.0	12.6	32.5	44.5	.5	(NA)	(NA)
384	MEDICAL INSTRUMENTS AND SUPPLIES . .	24	9	.7	4.4	.6	1.1	2.8	12.5	7.5	18.7	.8	(NA)	(NA)
3842	SURGICAL APPLIANCES AND SUPPLIES . .	14	5	.5	2.6	.4	.7	1.6	4.8	3.2	7.9	.5	(NA)	(NA)
39	MISC. MANUFACTURING INDUSTRIES . . .	180	40	6.9	42.1	5.7	11.1	29.4	103.0	73.2	172.8	4.8	5.8	67.4
394	TOYS AND SPORTING GOODS. . . . .	36	11	1.7	10.9	1.4	2.5	7.2	29.4	17.5	45.4	1.3	1.2	12.6
395	PENS, PENCILS, OFFICE, ART GOODS . .	15	8	.7	5.2	.6	1.3	3.6	8.7	12.0	19.8	.1	2.0	21.0
396	COSTUME JEWELRY AND NOTIONS. . . . .	5	3	2.1	10.8	1.9	3.9	9.4	37.0	23.7	59.7	2.4	1.4	21.7
399	MISCELLANEOUS MANUFACTURES . . . . .	113	18	2.2	14.9	1.7	3.3	8.9	26.8	19.1	45.9	1.0	1.2	11.8
3991	BROOMS AND BRUSHES . . . . .	14	7	.4	1.8	.3	.5	1.3	3.7	4.4	8.0	.1	.2	1.6
3993	SIGNS AND ADVERTISING DISPLAYS . . .	67	6	.5	3.8	.4	.7	2.4	7.0	5.4	12.4	.3	.5	5.9
3995	BURIAL CASKETS . . . . .	4	3	.4	2.4	.3	.6	1.3	3.8	3.3	7.1	.1	(NA)	(NA)
3999	MANUFACTURING INDUSTRIES, NEC. . . .	28	2	1.0	6.9	.8	1.6	3.8	12.3	5.9	18.5	.4	(NA)	(NA)
--	ADMINISTRATIVE AND AUXILIARY . . .	210	82	12.8	153.4	-	-	-	-	-	-	-	8.1	-

Note: The following symbols indicate employment size range for 1967:

AA less than 250 employees      EE 1,000 to 2,499 employees  
BB 250 to 499 employees      FF 2,500 employees and over  
CC 500 to 999 employees

- Represents zero. (NA) Not available. Because of a revision to this industry or industry group in the 1972 edition of the SIC manual, 1967 census data are not available on a comparable basis. (D) Withheld to avoid disclosing figures for individual companies.

<sup>1</sup>The total cost of materials and value of shipments for industry groups shown may include extensive duplication arising from shipments between establishments in the same industry classification. (For a more complete explanation, see appendix.)

<sup>2</sup>Includes figures for industry groups which have been withheld from publication in order to (a) avoid disclosing figures for individual companies or (b) permit further checking of figures for smaller industry groups. Additional detail will appear in the final report for this State.



## Appendix A. SCOPE AND COVERAGE

This report is one of a series presenting preliminary information, by State, from the 1972 Census of Manufactures. The data will be superseded in a final report which, in turn, will be included in *Volume III, Area Statistics, 1972 Census of Manufactures*. The final report will include a comprehensive discussion of the concepts and definitions used in the census.

The census of manufactures covers each manufacturing establishment in the United States with one paid employee or more; manufacturing establishments with no employees are excluded. Firms which operated more than one establishment were required to file a separate report for each location. Companies which engaged in distinctly different lines of activity at one location were asked to submit separate reports if the company records permitted such a separation and the activities were of significant size.

This report includes figures for administrative offices, warehouses, garages, or other auxiliary units which service manufacturing establishments.

In the 1972 census, the approximately 120,000 manufacturing establishments with fewer than 10 employees were excused from filing reports. Under special arrangements which safeguarded the confidentiality of both tax and census records, data on payrolls, sales, and industry classification from the administrative records of the Social Security Administration and the Internal Revenue Service were made available to the Census Bureau for use in the 1972 Economic Censuses (retail and wholesale trade, service industries, construction industries, manufactures, and mineral industries). Estimates for data other than payrolls and sales for these small establishments were constructed from industry averages. The effect on industry aggregates is slight in most industries. For manufacturing as a whole, these small establishments account for less than 3 percent of the payrolls and value added.

Establishments are classified by industry in accordance with industry definitions described in the 1972 edition of the Standard Industrial Classification (SIC) Manual. For 1972, the SIC was significantly revised and the comparability with prior year's data for some industries was significantly affected. The comparability at the 2- and 3-digit SIC levels was less affected. The final volumes of the 1972 Census of Manufactures will contain a table relating aggregates based on the 1972 SIC with aggregates derived from classifying establishments according to the 1967 SIC definitions.

As in earlier censuses, a number of small establishments may have been misclassified as to industry. However, such possible misclassifications have significant effect on *none* of the statistics except the number of establishments. As indicated above, report forms were not mailed to very small establishments (fewer than 10 employees). The industry classifications for these establishments were assigned on the basis of brief descriptions of the general activity of the establishment. Where the description is incomplete or there are relatively fine lines of demarcation among industries or between manufacturing and nonmanufacturing activity, the code assigned to an establishment could differ from that which would have been assigned on the basis of more complete product information. Therefore, the total establishment count for individual industries should be viewed as an approximation rather than a precise measurement. The counts for establishments with 20 employees or more are more reliable than the total number of establishments.

More detailed figures for this State will appear in the final census reports. Final reports will also include a comprehensive discussion of such concepts as "industry" and "establishment," as well as the various statistical items such as "employment," "value of shipments," and "value added." Similar preliminary and final reports will be issued for other States during the coming months. A series of preliminary summary reports showing U.S. totals for each manufacturing industry and for each State are being issued. Final industry reports and final area reports will be published during 1974.

Order forms describing the individual reports and listing their prices may be obtained from any U.S. Department of Commerce district office or from the Publications Distribution Section, Social and Economic Statistics Administration, Washington, D.C. 20233.

The 1972 Census of Manufactures is the 29th census of manufacturing establishments in the United States. For 1972, it was conducted jointly with the censuses of mineral industries, construction industries, retail trade, wholesale trade, and selected services under authority of Title 13 of the United States Code. Title 13 specifies that a census of manufactures be conducted every 5 years and, as amended, to cover years ending in "2" and "7". Title 13 also authorizes an annual sample survey of manufacturing establishments in interim years.



## Appendix B. EXPLANATION OF TERMS

*(For a more complete discussion of these terms and the method of compiling the Census of Manufactures, see the "Introduction" to the 1967 Census of Manufactures, Volume III).*

**All Employees**—All full-time and part-time employees on the payrolls of operating manufacturing establishments for any part of the pay period ending nearest the 12th of the months specified on the report form. Included are all persons on paid sick leave, paid holidays, and paid vacations during these pay periods. Officers of corporations are included as employees; proprietors and partners of unincorporated firms are excluded. The "all employee" number is the average number of production workers for the midmonth payroll period of March, May, August, and November plus the number of nonproduction employees in mid-March.

**Number of Production Workers**—Workers (up through the working foreman level) engaged in fabricating, processing, assembling, inspecting, receiving, packing, warehousing, shipping (but not delivering), and maintenance, repair, janitorial, and watchman services, product development, auxiliary production for plant's own use (e.g., powerplant), recordkeeping, and other closely associated services. Proprietors and partners are excluded.

**Payroll**—This item includes all forms of compensation such as salaries, wages, commissions, dismissal pay, bonuses, vacation and sick leave pay, and compensation in kind, prior to such deductions as employees' Social Security contributions, withholding taxes, group insurance, union dues, and savings bonds. The total includes salaries of officers of these establishments, if a corporation; it excludes payments to the proprietor or partners, if an unincorporated concern. Respondents were told that in reporting they could follow the definition of payrolls used for calculating the Federal withholding tax.

**Man-Hours of Production Workers**—This total relates to production-worker man-hours worked or paid for at the plant including actual overtime hours (not straight-time equivalent hours). It excludes hours paid for vacation, holidays, or sick leave when the employee was not at the plant.

**Cost of Materials**—The term "Cost of Materials" refers to charges actually paid or payable for items consumed or put into production during the year, including freight and other direct charges incurred by the establishment in acquiring these materials. It includes the cost of materials or fuel consumed regardless of

whether these items were purchased by the establishment from other companies, transferred to it from other establishments of the same company, or withdrawn from inventory during the year. The establishment was requested to value materials transferred from other parts of the company at its approximate market value, not at cost of production. The important components of this cost item are (a) all raw materials, semifinished goods, parts, components, containers, scrap, and supplies put into production or used as operating supplies and for repair and maintenance during the year; (b) electric energy purchased; (c) fuels consumed for heat, power, or the generation of electricity; (d) work done by others on materials or parts furnished by manufacturing establishments (contract work); and (e) products bought and resold in the same condition.

**Value of Shipments**—The value of shipments is the received or receivable net selling value, f.o.b. plant (exclusive of freight and taxes), of all products shipped, both primary and secondary, as well as all miscellaneous receipts such as receipts for contract work performed for others, installation and repair, sales of scrap, and sale of products bought and resold without further processing. Included are all items made by the establishment or for it under contract from materials owned by it whether sold, transferred to other plants of the same company, or shipped on consignment. The net selling value of products made in one plant on a contract basis from materials owned by another was reported by the plant providing the materials.

In the case of multiunit companies, the manufacturer was requested to report the value of products transferred to other establishments of the same company at full economic value; i.e., to include not only the direct costs of production but also a reasonable proportion of "all other costs" (including company overhead) and profit.

**Duplication in Cost of Materials and Value of Products**—The aggregate cost of materials and value-of-shipments figures for industry groups and for all manufacturing industries may include large amounts of duplication since the products of some industries are used as materials by others. With some important exceptions, such as motor vehicles and parts, this duplication is not significant within individual industries but arises from the addition of the totals of related industries in successive stages of the production of a finished manufactured product. Examples are the addition of flour mills to bakeries in the food group and the addition of pulp mills to paper mills in the paper and allied products group of industries. Esti-



mates of this duplication indicate that the value of manufactured products exclusive of such duplication—the value of finished manufactures—approximates two-thirds of the total value of products.

Prior to 1962, the Bureau of the Census did not publish figures for cost of materials or value of shipments if they contained significant duplication. Effective with the 1962 annual survey these figures were shown at all industry levels for the United States to meet the requests for their use in studies in which the presence of an indeterminate amount of duplication is not a limiting factor. However, they are appropriately footnoted. Effective with the 1964 annual survey, these industry group totals are also shown at the State, standard metropolitan statistical area, and large-county level.

Even where there is no significant amount of duplication, value-of-shipments figures are deficient as measures of the relative economic importance of individual manufacturing industries or geographic areas because of the wide variation in ratio of materials, labor, and other processing costs to value of shipments among industries.

**Value Added by Manufacture**—This measure of manufacturing activity is derived by subtracting the cost of materials, supplies, containers, fuel, purchased electricity, and cost of resales contract work from the value of shipments for products manufactured plus resales and receipts for services rendered. The result of this calculation is adjusted by the net change in finished goods and work-in-process inventories between the beginning and end of the year. (In the few industries that report value of production rather than value of shipments, only changes in work-in-process inventories are used to adjust value added. In the shipbuilding and repairing industry, no inventory adjustment is made.)

"Value added" avoids the duplication in the value of shipments figure which results from the use of products of some establishments as materials by others. Value added is considered to be the best value measure available for comparing the relative economic importance of manufacturing among industries and geographic areas.

**Expenditures for Plant and Equipment**—Manufacturing establishments in operation and establishments under construction but not yet in operation, were asked to report their expenditures for (a) permanent additions and major alterations to the manufacturing establishment, and (b) new machinery and equipment used for replacement purposes and additions to plant capacity if they are of the type for which depreciation accounts are ordinarily maintained.

These totals exclude expenditures for new facilities and equipment leased from nonmanufacturing concerns; new facilities owned by the Federal Government but operated under contract by private companies; and plant and equipment furnished to the manufacturer by communities and nonprofit organizations. Expenditures for used plant and equipment (although reported in the census), expenditures for land, and cost of maintenance and repairs charged as current operating expense are also omitted from the figures for new capital expenditures.

**Central Administrative Offices and Auxiliary Units**—In the 1972 census as in previous years, respondents were asked to file separate reports for central administrative offices or auxiliary units which were (1) at different locations from the establishments served or, (2) at the same location as one of these establishments but were not operated as an integral part thereof and served two or more establishments. The functions of employees in central administrative offices include general company policy determination, planning and management (that is, company purchasing, accounting, general engineering, direction of company personnel matters, and legal and patent matters). Auxiliaries are storage facilities, garages, repair shops, purchasing offices, sales promotion offices, and research laboratories serving the plants or central management of the company.

**Standard Metropolitan Statistical Areas**—Standard metropolitan statistical areas (SMSA) are integrated economic and social units with a large volume of daily travel and communication between the central city and outlying parts of the area.<sup>1</sup> Each area (except in New England) consists of one whole county or more. An area may contain not only highly industrialized counties but also adjoining counties which, though primarily residential in character, contribute significantly to the industrial counties' labor force and are socially and economically integrated with the central city. These areas are defined by the Federal Committee on Standard Metropolitan Statistical Areas of the Office of Management and Budget for general-purpose use throughout the Federal Government in presenting economic and social data. In the New England States, similar intergration criteria are applied in defining

<sup>1</sup> Each standard metropolitan statistical area must include either (1) a city with 50,000 or more inhabitants, or (2) a city having a population of at least 25,000 which (a) with the addition of the population of contiguous places has a population density of at least 1,000 persons per square mile; (b) constitutes, for general economic and social purposes, a single community with a combined population of at least 50,000; and (c) includes a total population of at least 75,000 in the county or counties in which the city and contiguous places are located.

SMSA's on a city and town basis because towns rather than counties are regarded as the significant unit in this region of the country.

The requirement that each SMSA consist of county units (except in New England) sometimes results in the inclusion in an area of considerable amount of territory which would not ordinarily be considered "metropolitan," much less "industrial." It is recognized that metropolitan areas could be more accurately defined in terms of smaller area segments such as minor civil

divisions, but the usefulness of areas so defined would be limited by the fact that many types of economic and social data are available only on a county basis.

Each SMSA is designated by the name of the principal city of the area. In addition to the name of the principal city, the area title may include one or two additional city names.

The data for SMSA's which changed definition since the 1967 census have not been retabulated on the new basis for years prior to 1972.



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## PRELIMINARY REPORT

**1972 CENSUS OF  
MANUFACTURES**

## AREA SERIES

72(P)-S12

U. S. DEPARTMENT OF COMMERCE • Social and Economic Statistics Administration • BUREAU OF THE CENSUS

ed April 1974

**Hawaii**

Value added by manufacturing in 1972 in the State of Hawaii amounted to \$412 million, a 26-percent increase from 1967.

This report presents preliminary results from the 1972 Census of Manufactures for the State, its Standard Metropolitan Statistical Area, and its counties.

Data are provided for industry groups within the State. Historical data, back to 1958, are included for the State as a whole, and 1967 figures on employment and value

added are provided for the smaller areas.

The figures in this report have been subjected to only preliminary review and must be regarded as approximations of the final census figures. No adjustments have been made in the value figures for changes in price level.

For an explanation of the terms used in the tables, see the appendix at the end of this report.

**TABLE 1. General Statistics for the State: 1972 and Earlier Years**

(See appendix, Explanation of Terms)

Year	Establishments		All employees <sup>1</sup>		Production workers			Value added by manufacture	Cost of materials <sup>2</sup>	Value of shipments <sup>2</sup>	Capital expenditures, new
	Total	With 20 employees or more	Number	Payroll	Number	Man-hours	Wages				
	(number)	(number)	(1,000)	(million dollars)	(1,000)	(millions)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(million dollars)
HAWAII											
1972 Census .....	765	238	24.8	190.2	17.6	33.1	113.0	412.3	543.8	953.6	46.6
1971 ASM .....	(NA)	(NA)	24.4	176.6	17.5	34.3	105.7	435.0	465.9	899.9	28.0
1970 ASM .....	(NA)	(NA)	24.8	168.7	18.1	35.3	102.8	408.6	451.1	856.9	40.5
1969 ASM .....	(NA)	(NA)	23.9	145.3	17.9	33.2	90.8	351.0	408.3	758.1	19.8
1968 ASM .....	(NA)	(NA)	23.2	134.0	17.4	32.2	83.3	353.9	381.9	737.1	15.6
1967 Census .....	697	215	25.4	139.6	19.0	35.9	86.9	326.2	399.6	723.4	26.0
1966 ASM .....	(NA)	(NA)	24.8	123.8	18.7	34.3	78.2	310.8	371.5	680.9	24.1
1965 ASM .....	(NA)	(NA)	25.4	118.1	18.7	34.0	73.5	292.1	365.9	655.5	17.2
1964 ASM .....	(NA)	(NA)	25.0	113.7	18.3	33.1	69.4	268.8	372.0	638.4	17.7
1963 Census .....	672	203	25.1	109.0	18.7	33.2	67.5	261.1	(NA)	(NA)	15.4
1962 ASM .....	(NA)	(NA)	22.6	94.0	16.2	29.9	57.5	199.0	(NA)	(NA)	14.2
1961 ASM .....	(NA)	(NA)	23.2	93.4	16.8	31.2	57.4	204.5	(NA)	(NA)	31.5
1960 ASM .....	(NA)	(NA)	23.5	89.4	17.4	32.7	56.6	183.2	(NA)	(NA)	60.6
1959 ASM .....	(NA)	(NA)	26.0	93.1	19.4	35.9	61.8	197.1	(NA)	(NA)	(D)
1958 Census .....	618	179	23.9	82.2	17.8	31.9	51.8	164.9	(NA)	(NA)	17.2

Note: "ASM" data are based on a representative sample of manufacturing establishments canvassed in the Annual Survey of Manufactures. These estimates may differ from the results of a complete canvass of all manufacturing establishments. The standard errors associated with these estimates are published in the annual survey of manufactures volumes for this period. For comparative purposes, the 1972 ASM estimate for the State of Hawaii was 24 thousand employees, and \$450 million in value added with corresponding standard error of estimate of 4 and 3.

(NA) Not available. (D) Withheld to avoid disclosing figures for individual companies.

<sup>1</sup>Includes employment and payroll at central administrative offices and auxiliary units. (For a definition of these units, see appendix.)

<sup>2</sup>The total cost of materials and value of shipments may include extensive duplication arising from shipments between establishments in the same industry classification. (For a more complete explanation, see appendix.)

TABLE 2. General Statistics for the State, Standard Metropolitan Statistical Areas, and Counties: 1972 and 1967

(See appendix, Explanation of Terms)

State, standard metropolitan statistical areas, and counties <sup>1</sup>	1972											1967	
	Establishments		All employees <sup>2</sup>		Production workers			Value added by manufacture	Cost of materials <sup>3</sup>	Value of shipments <sup>3</sup>	Capital expenditures, new	All employees	Value added by manufacture
	Total	With 20 employees or more	Number	Payroll	Number	Man-hours	Wages	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(1,000)	(million dollars)
	(number)	(number)	(1,000)	(million dollars)	(1,000)	(million)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(1,000)	(million dollars)
HAWAII, TOTAL . . . . .	765	238	24.8	190.2	17.6	33.1	113.0	412.3	543.8	953.6	46.6	25.4	326.2
STANDARD METROPOLITAN STATISTICAL AREAS <sup>4</sup>													
HONOLULU . . . . .	596	187	19.2	145.4	13.5	24.9	83.0	315.2	407.5	721.3	33.0	19.5	252.2
COUNTIES													
HAWAII . . . . .	83	22	2.3	19.5	1.7	3.3	12.8	49.2	51.3	100.3	10.1	1.9	34.4
HONOLULU . . . . .	596	187	19.2	145.4	13.5	24.9	83.0	315.2	407.5	721.3	33.0	19.5	252.2
KAUAI . . . . .	28	8	.8	5.8	.6	1.1	4.0	16.7	25.2	42.0	1.4	1.2	20.6
MAUI . . . . .	49	13	2.3	18.4	1.7	3.5	12.3	27.4	53.8	80.9	2.1	2.8	19.0

<sup>1</sup>Some counties were withheld from publication in order to (a) avoid disclosing figures for individual companies or (b) permit further checking of the figures for smaller counties. Additional detail will appear in the final report for this State.

<sup>2</sup>Includes employment and payroll at central administrative offices and auxiliary units. (For a definition of these units, see appendix.)

<sup>3</sup>The total cost of materials and value of shipments may include extensive duplication arising from shipments between establishments in the same industry classification. (For a more complete explanation, see appendix.)

<sup>4</sup>The standard metropolitan statistical area in this State is defined as follows:  
HONOLULU SMSA: Coextensive with Honolulu County, HI.

TABLE 3. General Statistics for the State, by Industry Groups and Industries: 1972 and 1967

(See appendix, Explanation of Terms)

Code	Industry	1972											1967	
		Establishments		All employees		Production workers			Value added by manufacture	Cost of materials <sup>1</sup>	Value of shipments <sup>1</sup>	Capital expenditures, new	All employees	Value added by manufacture
		Total	With 20 employees or more	Number	Payroll	Number	Man-hours	Wages	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(1,000)	(million dollars)
		(number)	(number)	(1,000)	(million dollars)	(1,000)	(million)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(1,000)	(million dollars)
	ALL INDUSTRIES, TOTAL <sup>2</sup> . . . . .	765	238	24.8	190.2	17.6	33.1	113.0	412.3	543.8	953.6	46.6	25.4	326.2
20	FOOD AND KINDRED PRODUCTS . . . . .	204	67	11.7	86.7	8.8	16.9	56.1	206.7	301.6	507.9	18.7	14.2	185.4
201	MEAT PRODUCTS . . . . .	18	6	.4	2.7	.3	.5	1.8	5.9	24.0	30.0	(D)	BB	(D)
203	PRESERVED FRUITS AND VEGETABLES . . . . .	36	5	4.9	28.2	4.4	8.0	22.0	70.5	71.2	141.7	2.3	(NA)	(NA)
2033	CANNED FRUITS AND VEGETABLES . . . . .	15	5	4.8	27.4	4.3	7.8	21.5	69.0	69.4	138.4	2.1	6.8	67.2
205	BAKERY PRODUCTS . . . . .	17	7	.7	6.1	.4	.7	3.0	11.2	7.7	18.9	.5	.7	8.7
2051	BREAD, CAKE, AND RELATED PRODUCTS . . . . .	13	5	.6	5.5	.3	.6	2.7	10.3	6.2	16.5	.5	.6	7.9
206	SUGAR AND CONFECTIONERY PRODUCTS . . . . .	37	24	3.8	32.8	2.6	5.4	21.4	80.3	122.8	202.7	(D)	(NA)	(NA)
2061	RAW CANE SUGAR . . . . .	18	18	3.3	29.5	2.3	4.8	19.4	70.8	106.7	177.5	13.5	3.8	71.3
209	MISC. FOODS AND KINDRED PRODUCTS . . . . .	56	6	.7	4.5	.5	1.1	3.1	9.4	13.3	22.7	.6	(NA)	(NA)
23	APPAREL, OTHER TEXTILE PRODUCTS . . . . .	120	55	3.3	15.5	2.9	5.3	11.8	31.0	17.4	47.7	.6	2.5	16.3
2335	WOMEN'S AND MISSES' DRESSES . . . . .	50	25	1.7	7.9	1.4	2.5	5.8	15.8	7.9	23.4	.2	1.0	6.7
239	MISC. FABRICATED TEXTILE PRODUCTS . . . . .	21	5	.3	1.1	.3	.5	.8	2.0	2.5	4.5	.1	(NA)	(NA)
24	LUMBER AND WOOD PRODUCTS . . . . .	38	12	.9	7.4	.7	1.3	5.4	13.1	12.4	25.3	.6	(NA)	(NA)
25	FURNITURE AND FIXTURES . . . . .	26	11	.7	5.1	.4	.7	2.4	7.9	11.1	18.4	1.0	CC	(D)
251	HOUSEHOLD FURNITURE . . . . .	16	9	.6	4.3	.3	.6	2.0	6.6	10.2	16.1	.9	(NA)	(NA)
27	PRINTING AND PUBLISHING . . . . .	115	22	2.7	23.9	1.4	2.4	11.9	53.1	20.1	73.2	9.1	2.0	27.0
275	COMMERCIAL PRINTING . . . . .	64	9	.7	6.8	.5	.9	4.3	13.4	9.1	22.7	1.4	(NA)	(NA)
2752	COMMERCIAL PRINTING, LITHOGRAPHIC . . . . .	26	8	.5	5.3	.3	.6	3.3	9.4	5.8	15.2	1.1	(NA)	(NA)
32	STONE, CLAY, AND GLASS PRODUCTS . . . . .	40	12	1.0	11.7	.7	1.5	7.4	29.4	23.8	53.2	4.0	1.1	18.4
35	MACHINERY, EXCEPT ELECTRICAL . . . . .	28	3	.4	3.4	.3	.5	2.4	4.8	3.6	7.7	.2	.5	5.5
39	MISC. MANUFACTURING INDUSTRIES . . . . .	53	9	.8	3.8	.6	1.1	1.9	6.7	4.8	11.5	.8	.5	2.0
399	MISCELLANEOUS MANUFACTURES . . . . .	26	5	.6	2.3	.4	.8	1.0	3.6	2.6	6.3	.7	.3	1.1
--	ADMINISTRATIVE AND AUXILIARY . . . . .	22	9	.8	11.2	-	-	-	-	-	-	-	1.0	-

Note: The following symbols indicate employment size range for 1967:

AA less than 250 employees      EE 1,000 to 2,499 employees  
BB 250 to 499 employees      FF 2,500 employees and over  
CC 500 to 999 employees

- Represents zero. (NA) Not available. Because of a revision to this industry or industry group in the 1972 edition of the SIC manual, 1967 census data are not available on a comparable basis. (D) Withheld to avoid disclosing figures for individual companies.

<sup>1</sup>The total cost of materials and value of shipments for industry groups shown may include extensive duplication arising from shipments between establishments in the same industry classification. (For a more complete explanation, see appendix.)

<sup>2</sup>Includes figures for industry groups which have been withheld from publication in order to (a) avoid disclosing figures for individual companies or (b) permit further checking of figures for smaller industry groups. Additional detail will appear in the final report for this State.



## Appendix A. SCOPE AND COVERAGE

This report is one of a series presenting preliminary information, by State, from the 1972 Census of Manufactures. The data will be superseded in a final report which, in turn, will be included in *Volume III, Area Statistics, 1972 Census of Manufactures*. The final report will include a comprehensive discussion of the concepts and definitions used in the census.

The census of manufactures covers each manufacturing establishment in the United States with one paid employee or more; manufacturing establishments with no employees are excluded. Firms which operated more than one establishment were required to file a separate report for each location. Companies which engaged in distinctly different lines of activity at one location were asked to submit separate reports if the company records permitted such a separation and the activities were of significant size.

This report includes figures for administrative offices, warehouses, garages, or other auxiliary units which service manufacturing establishments.

In the 1972 census, the approximately 120,000 manufacturing establishments with fewer than 10 employees were excused from filing reports. Under special arrangements which safeguarded the confidentiality of both tax and census records, data on payrolls, sales, and industry classification from the administrative records of the Social Security Administration and the Internal Revenue Service were made available to the Census Bureau for use in the 1972 Economic Censuses (retail and wholesale trade, service industries, construction industries, manufactures, and mineral industries). Estimates for data other than payrolls and sales for these small establishments were constructed from industry averages. The effect on industry aggregates is slight in most industries. For manufacturing as a whole, these small establishments account for less than 3 percent of the payrolls and value added.

Establishments are classified by industry in accordance with industry definitions described in the 1972 edition of the Standard Industrial Classification (SIC) Manual. For 1972, the SIC was significantly revised and the comparability with prior year's data for some industries was significantly affected. The comparability at the 2- and 3-digit SIC levels was less affected. The final volumes of the 1972 Census of Manufactures will contain a table relating aggregates based on the 1972 SIC with aggregates derived from classifying establishments according to the 1967 SIC definitions.

As in earlier censuses, a number of small establishments may have been misclassified as to industry. However, such possible misclassifications have significant effect on *none* of the statistics except the number of establishments. As indicated above, report forms were not mailed to very small establishments (fewer than 10 employees). The industry classifications for these establishments were assigned on the basis of brief descriptions of the general activity of the establishment. Where the description is incomplete or there are relatively fine lines of demarcation among industries or between manufacturing and nonmanufacturing activity, the code assigned to an establishment could differ from that which would have been assigned on the basis of more complete product information. Therefore, the total establishment count for individual industries should be viewed as an approximation rather than a precise measurement. The counts for establishments with 20 employees or more are more reliable than the total number of establishments.

More detailed figures for this State will appear in the final census reports. Final reports will also include a comprehensive discussion of such concepts as "industry" and "establishment," as well as the various statistical items such as "employment," "value of shipments," and "value added." Similar preliminary and final reports will be issued for other States during the coming months. A series of preliminary summary reports showing U.S. totals for each manufacturing industry and for each State are being issued. Final industry reports and final area reports will be published during 1974.

Order forms describing the individual reports and listing their prices may be obtained from any U.S. Department of Commerce district office or from the Publications Distribution Section, Social and Economic Statistics Administration, Washington, D.C. 20233.

The 1972 Census of Manufactures is the 29th census of manufacturing establishments in the United States. For 1972, it was conducted jointly with the censuses of mineral industries, construction industries, retail trade, wholesale trade, and selected services under authority of Title 13 of the United States Code. Title 13 specifies that a census of manufactures be conducted every 5 years and, as amended, to cover years ending in "2" and "7". Title 13 also authorizes an annual sample survey of manufacturing establishments in interim years.



## Appendix B. EXPLANATION OF TERMS

*(For a more complete discussion of these terms and the method of compiling the Census of Manufactures, see the "Introduction" to the 1967 Census of Manufactures, Volume III).*

**All Employees**—All full-time and part-time employees on the payrolls of operating manufacturing establishments for any part of the pay period ending nearest the 12th of the months specified on the report form. Included are all persons on paid sick leave, paid holidays, and paid vacations during these pay periods. Officers of corporations are included as employees; proprietors and partners of unincorporated firms are excluded. The "all employee" number is the average number of production workers for the midmonth payroll period of March, May, August, and November plus the number of nonproduction employees in mid-March.

**Number of Production Workers**—Workers (up through the working foreman level) engaged in fabricating, processing, assembling, inspecting, receiving, packing, warehousing, shipping (but not delivering), and maintenance, repair, janitorial, and watchman services, product development, auxiliary production for plant's own use (e.g., powerplant), recordkeeping, and other closely associated services. Proprietors and partners are excluded.

**Payroll**—This item includes all forms of compensation such as salaries, wages, commissions, dismissal pay, bonuses, vacation and sick leave pay, and compensation in kind, prior to such deductions as employees' Social Security contributions, withholding taxes, group insurance, union dues, and savings bonds. The total includes salaries of officers of these establishments, if a corporation; it excludes payments to the proprietor or partners, if an unincorporated concern. Respondents were told that in reporting they could follow the definition of payrolls used for calculating the Federal withholding tax.

**Man-Hours of Production Workers**—This total relates to production-worker man-hours worked or paid for at the plant including actual overtime hours (not straight-time equivalent hours). It excludes hours paid for vacation, holidays, or sick leave when the employee was not at the plant.

**Cost of Materials**—The term "Cost of Materials" refers to charges actually paid or payable for items consumed or put into production during the year, including freight and other direct charges incurred by the establishment in acquiring these materials. It includes the cost of materials or fuel consumed regardless of

whether these items were purchased by the establishment from other companies, transferred to it from other establishments of the same company, or withdrawn from inventory during the year. The establishment was requested to value materials transferred from other parts of the company at its approximate market value, not at cost of production. The important components of this cost item are (a) all raw materials, semifinished goods, parts, components, containers, scrap, and supplies put into production or used as operating supplies and for repair and maintenance during the year; (b) electric energy purchased; (c) fuels consumed for heat, power, or the generation of electricity; (d) work done by others on materials or parts furnished by manufacturing establishments (contract work); and (e) products bought and resold in the same condition.

**Value of Shipments**—The value of shipments is the received or receivable net selling value, f.o.b. plant (exclusive of freight and taxes), of all products shipped, both primary and secondary, as well as all miscellaneous receipts such as receipts for contract work performed for others, installation and repair, sales of scrap, and sale of products bought and resold without further processing. Included are all items made by the establishment or for it under contract from materials owned by it whether sold, transferred to other plants of the same company, or shipped on consignment. The net selling value of products made in one plant on a contract basis from materials owned by another was reported by the plant providing the materials.

In the case of multiunit companies, the manufacturer was requested to report the value of products transferred to other establishments of the same company at full economic value; i.e., to include not only the direct costs of production but also a reasonable proportion of "all other costs" (including company overhead) and profit.

**Duplication in Cost of Materials and Value of Products**—The aggregate cost of materials and value-of-shipments figures for industry groups and for all manufacturing industries may include large amounts of duplication since the products of some industries are used as materials by others. With some important exceptions, such as motor vehicles and parts, this duplication is not significant within individual industries but arises from the addition of the totals of related industries in successive stages of the production of a finished manufactured product. Examples are the addition of flour mills to bakeries in the food group and the addition of pulp mills to paper mills in the paper and allied products group of industries. Esti-



mates of this duplication indicate that the value of manufactured products exclusive of such duplication—the value of finished manufactures—approximates two-thirds of the total value of products.

Prior to 1962, the Bureau of the Census did not publish figures for cost of materials or value of shipments if they contained significant duplication. Effective with the 1962 annual survey these figures were shown at all industry levels for the United States to meet the requests for their use in studies in which the presence of an indeterminate amount of duplication is not a limiting factor. However, they are appropriately footnoted. Effective with the 1964 annual survey, these industry group totals are also shown at the State, standard metropolitan statistical area, and large-county level.

Even where there is no significant amount of duplication, value-of-shipments figures are deficient as measures of the relative economic importance of individual manufacturing industries or geographic areas because of the wide variation in ratio of materials, labor, and other processing costs to value of shipments among industries.

**Value Added by Manufacture**—This measure of manufacturing activity is derived by subtracting the cost of materials, supplies, containers, fuel, purchased electricity, and cost of resales contract work from the value of shipments for products manufactured plus resales and receipts for services rendered. The result of this calculation is adjusted by the net change in finished goods and work-in-process inventories between the beginning and end of the year. (In the few industries that report value of production rather than value of shipments, only changes in work-in-process inventories are used to adjust value added. In the shipbuilding and repairing industry, no inventory adjustment is made.)

“Value added” avoids the duplication in the value of shipments figure which results from the use of products of some establishments as materials by others. Value added is considered to be the best value measure available for comparing the relative economic importance of manufacturing among industries and geographic areas.

**Expenditures for Plant and Equipment**—Manufacturing establishments in operation and establishments under construction but not yet in operation, were asked to report their expenditures for (a) permanent additions and major alterations to the manufacturing establishment, and (b) new machinery and equipment used for replacement purposes and additions to plant capacity if they are of the type for which depreciation accounts are ordinarily maintained.

These totals exclude expenditures for new facilities and equipment leased from nonmanufacturing concerns; new facilities owned by the Federal Government but operated under contract by private companies; and plant and equipment furnished to the manufacturer by communities and nonprofit organizations. Expenditures for used plant and equipment (although reported in the census), expenditures for land, and cost of maintenance and repairs charged as current operating expense are also omitted from the figures for new capital expenditures.

**Central Administrative Offices and Auxiliary Units**—In the 1972 census as in previous years, respondents were asked to file separate reports for central administrative offices or auxiliary units which were (1) at different locations from the establishments served or, (2) at the same location as one of these establishments but were not operated as an integral part thereof and served two or more establishments. The functions of employees in central administrative offices include general company policy determination, planning and management (that is, company purchasing, accounting, general engineering, direction of company personnel matters, and legal and patent matters). Auxiliaries are storage facilities, garages, repair shops, purchasing offices, sales promotion offices, and research laboratories serving the plants or central management of the company.

**Standard Metropolitan Statistical Areas**—Standard metropolitan statistical areas (SMSA) are integrated economic and social units with a large volume of daily travel and communication between the central city and outlying parts of the area.<sup>1</sup> Each area (except in New England) consists of one whole county or more. An area may contain not only highly industrialized counties but also adjoining counties which, though primarily residential in character, contribute significantly to the industrial counties' labor force and are socially and economically integrated with the central city. These areas are defined by the Federal Committee on Standard Metropolitan Statistical Areas of the Office of Management and Budget for general-purpose use throughout the Federal Government in presenting economic and social data. In the New England States, similar intergration criteria are applied in defining

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<sup>1</sup> Each standard metropolitan statistical area must include either (1) a city with 50,000 or more inhabitants, or (2) a city having a population of at least 25,000 which (a) with the addition of the population of contiguous places has a population density of at least 1,000 persons per square mile; (b) constitutes, for general economic and social purposes, a single community with a combined population of at least 50,000; and (c) includes a total population of at least 75,000 in the county or counties in which the city and contiguous places are located.

SMSA's on a city and town basis because towns rather than counties are regarded as the significant unit in this region of the country.

The requirement that each SMSA consist of county units (except in New England) sometimes results in the inclusion in an area of considerable amount of territory which would not ordinarily be considered "metropolitan," much less "industrial." It is recognized that metropolitan areas could be more accurately defined in terms of smaller area segments such as minor civil

divisions, but the usefulness of areas so defined would be limited by the fact that many types of economic and social data are available only on a county basis.

Each SMSA is designated by the name of the principal city of the area. In addition to the name of the principal city, the area title may include one or two additional city names.

The data for SMSA's which changed definition since the 1967 census have not been retabulated on the new basis for years prior to 1972.



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# 1972 CENSUS OF MANUFACTURES

## AREA SERIES

MC72(P)-S13

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### Idaho

Value added by manufacturing in 1972 in the State of Idaho amounted to \$750 million, a 12-percent increase from 1971 and a 49-percent increase from 1967.

This report presents preliminary results from the 1972 Census of Manufactures for the State, its Standard Metropolitan Statistical Area, and its counties.

Data are provided for industry groups within the State. Historical data, back to 1958, are included for the State as a whole,

and 1967 figures on employment and value added are provided for the smaller areas.

The figures in this report have been subjected to only preliminary review and must be regarded as approximations of the final census figures. No adjustments have been made in the value figures for changes in price level.

For an explanation of the terms used in the tables, see the appendix at the end of this report.

TABLE 1. General Statistics for the State: 1972 and Earlier Years

(See appendix, Explanation of Terms)

Year	Establishments		All employees <sup>1</sup>		Production workers			Value added by manufacture	Cost of materials <sup>2</sup>	Value of shipments <sup>2</sup>	Capital expenditures, new
	Total	With 20 employees or more	Number	Payroll	Number	Man-hours	Wages				
	(number)	(number)	(1,000)	(million dollars)	(1,000)	(millions)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(million dollars)
IDAHO											
1972 Census .....	1,178	339	41.3	317.3	33.2	62.6	231.2	749.8	1,193.8	1,934.6	72.8
1971 ASM .....	(NA)	(NA)	43.7	316.4	33.3	64.1	208.8	669.0	1,001.6	1,661.6	54.2
1970 ASM .....	(NA)	(NA)	45.3	299.4	34.7	65.6	198.7	649.7	930.9	1,573.6	53.2
1969 ASM .....	(NA)	(NA)	39.2	263.8	31.4	61.3	184.2	577.2	865.5	1,431.9	51.9
1968 ASM .....	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
1967 Census .....	1,131	303	37.1	219.9	29.0	56.9	157.0	503.4	713.4	1,224.5	57.7
1966 ASM .....	(NA)	(NA)	35.3	204.5	27.8	54.9	144.1	494.2	684.8	1,158.5	57.6
1965 ASM .....	(NA)	(NA)	33.1	186.1	26.3	51.3	131.8	443.8	630.0	1,062.5	81.3
1964 ASM .....	(NA)	(NA)	32.9	177.9	26.2	51.5	129.1	406.4	566.4	973.4	45.4
1963 Census .....	1,103	254	30.5	162.6	24.1	48.5	116.6	366.4	(NA)	(NA)	28.4
1962 ASM .....	(NA)	(NA)	29.4	150.1	23.4	45.6	110.1	297.3	(NA)	(NA)	26.6
1961 ASM .....	(NA)	(NA)	29.2	143.1	23.4	45.0	105.8	280.1	(NA)	(NA)	26.0
1960 ASM .....	(NA)	(NA)	29.4	141.6	23.6	46.2	105.5	276.2	(NA)	(NA)	37.4
1959 ASM .....	(NA)	(NA)	28.3	137.2	22.8	45.6	103.0	280.4	(NA)	(NA)	23.5
1958 Census .....	1,065	244	27.6	128.1	22.1	43.0	96.5	255.8	(NA)	(NA)	19.2

Note: "ASM" data are based on a representative sample of manufacturing establishments canvassed in the Annual Survey of Manufactures. These estimates may differ from the results of a complete canvass of all manufacturing establishments. The standard errors associated with these estimates are published in the annual survey of manufactures volumes for this period.

(NA) Not available.

<sup>1</sup>Includes employment and payroll at central administrative offices and auxiliary units. (For a definition of these units, see appendix.)

<sup>2</sup>The total cost of materials and value of shipments may include extensive duplication arising from shipments between establishments in the same industry classification. (For a more complete explanation, see appendix.)

TABLE 2. General Statistics for the State, Standard Metropolitan Statistical Areas, and Counties: 1972 and 1967

(See appendix, Explanation of Terms)

State, standard metropolitan statistical areas, and counties <sup>1</sup>	1972										1967		
	Establishments		All employees <sup>2</sup>		Production workers			Value added by manu- facture	Cost of materials <sup>3</sup>	Value of shipments <sup>3</sup>	Capital expendi- tures, new	All employees	Value added by manu- facture
	Total	With 20 employees or more	Number	Payroll	Number	Man-hours	Wages						
	(number)	(number)	(1,000)	(million dollars)	(1,000)	(million)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(1,000)	(million dollars)
IDAHO, TOTAL . . . . .	1 176	339	41.3	317.3	33.2	62.6	231.2	749.8	1 193.8	1 934.6	72.8	37.1	503.4
STANDARD METROPOLITAN STATISTICAL AREAS <sup>4</sup>													
BOISE CITY . . . . .	203	66	5.4	47.4	3.1	5.7	20.8	71.5	95.7	165.4	2.4	3.8	39.7
COUNTIES													
ADA . . . . .	203	66	5.4	47.4	3.1	5.7	20.8	71.5	95.7	165.4	2.4	3.8	39.7
ADAMS . . . . .	12	4	.3	2.8	.3	.5	2.5	6.1	5.7	11.7	.8	.2	3.2
BANNOCK . . . . .	20	17	1.7	14.3	1.2	2.3	9.4	48.5	76.6	125.3	2.5	1.1	13.4
BENFHAM . . . . .	52	9	.8	6.3	.8	1.3	5.6	16.7	14.8	30.6	1.5	.7	7.0
BINGHAM . . . . .	25	9	1.6	10.7	1.3	2.6	7.6	32.6	35.4	66.3	2.6	1.3	13.7
BONNER . . . . .	64	10	1.3	10.6	1.2	1.9	9.0	21.8	31.7	53.2	5.4	1.0	9.1
BONNEVILLE . . . . .	59	18	2.1	14.2	1.6	2.9	9.7	29.4	42.8	70.7	1.7	2.1	23.2
BOUNDARY . . . . .	27	5	.5	3.7	.4	.9	3.3	10.0	9.0	18.1	(D)	.4	3.7
CANYON . . . . .	85	34	7.0	46.1	6.0	11.1	35.4	115.3	239.8	355.6	6.1	4.1	47.8
CASSIA . . . . .	21	8	1.6	9.5	1.4	2.7	7.8	34.3	37.7	72.4	1.9	1.5	14.5
CLEARWATER . . . . .	65	18	1.3	10.7	1.1	2.2	9.7	22.1	42.2	64.5	3.1	1.7	19.6
IDAHO . . . . .	30	6	.6	5.1	.6	1.1	4.6	12.1	10.0	22.0	1.4	1.0	12.2
JEFFERSON . . . . .	14	2	.5	3.2	.5	.9	2.4	10.6	29.2	39.4	.2	.5	4.9
KOOTENAI . . . . .	64	22	2.4	19.0	1.9	3.8	14.9	43.4	40.3	82.7	1.9	1.7	16.3
LATAH . . . . .	34	9	.8	7.5	.7	1.4	6.3	15.7	28.7	44.1	.6	.8	8.3
MADISON . . . . .	18	5	.3	1.6	.2	.4	1.3	2.4	7.0	9.3	1.1	.3	2.0
MINIDOKA . . . . .	16	5	.5	3.9	.5	1.1	3.1	14.6	27.2	42.7	1.4	.5	4.9
NEZ PERCE . . . . .	54	16	3.8	34.8	3.0	5.6	25.5	60.4	87.7	146.5	13.3	3.2	67.6
PALETTE . . . . .	22	6	.4	2.4	.3	.5	1.7	4.5	14.2	19.5	.3	.5	3.9
TWIN FALLS . . . . .	51	19	1.9	11.9	1.5	2.6	7.9	35.7	53.2	90.8	3.5	1.6	24.1

(D) Withheld to avoid disclosing figures for individual companies.

<sup>1</sup>Some counties were withheld from publication in order to (a) avoid disclosing figures for individual companies or (b) permit further checking of the figures for smaller counties. Additional detail will appear in the final report for this State.<sup>2</sup>Includes employment and payroll at central administrative offices and auxiliary units. (For a definition of these units, see appendix.)<sup>3</sup>The total cost of materials and value of shipments may include extensive duplication arising from shipments between establishments in the same industry classification. (For a more complete explanation, see appendix.)<sup>4</sup>The standard metropolitan statistical area in this State is defined as follows:

BOISE CITY SMSA: Coextensive with Ada County, ID.



TABLE 3. General Statistics for the State, by Industry Groups and Industries: 1972 and 1967

(See appendix, Explanation of Terms)

Code	Industry	1972											1967	
		Establishments		All employees		Production workers			Value added by manufacture	Cost of materials <sup>1</sup>	Value of shipments <sup>1</sup>	Capital expenditures, new	All employees	Value added by manufacture
		Total (number)	With 20 employees or more (number)	Number (1,000)	Payroll (million dollars)	Number (1,000)	Man-hours (million)	Wages (million dollars)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(1,000)	(million dollars)
	ALL INDUSTRIES, TOTAL <sup>2</sup> . . . . .	1 176	339	41.3	317.3	33.2	62.6	231.2	743.8	1 173.5	1 331.6	72.8	37.1	503.4
20	FOOD AND KINDRED PRODUCTS . . . . .	164	91	13.8	89.8	11.4	22.1	65.9	258.2	543.3	803.8	18.6	12.2	143.4
201	MEAT PRODUCTS . . . . .	33	11	.8	7.8	.6	1.2	5.4	20.7	144.9	164.1	1.6	1.7	11.7
202	DAIRY PRODUCTS . . . . .	45	22	1.6	11.3	1.0	2.0	6.6	25.8	125.5	152.3	2.0	1.7	18.9
2022	CHEESE, NATURAL AND PROCESSED . . . . .	16	10	.7	4.8	.6	1.2	3.8	7.8	62.2	71.2	.9	.6	4.1
2026	FLUID MILK . . . . .	10	7	.5	4.3	.2	.4	1.5	8.6	26.8	35.5	.3	.6	6.0
2037	FROZEN FRUITS AND VEGETABLES . . . . .	9	9	5.0	29.9	4.5	9.0	24.8	86.1	102.3	188.5	(D)	4.1	39.8
204	GRAIN MILL PRODUCTS . . . . .	22	0	.5	3.1	.3	.7	1.7	8.7	23.1	31.1	.6	.6	4.3
208	BEVERAGES . . . . .	13	11	.3	2.4	.1	.2	.7	5.9	5.7	11.6	.4	BB	(D)
2086	BOTTLED AND CANNED SOFT DRINKS . . . . .	13	11	.3	2.4	.1	.2	.7	5.9	5.7	11.6	.4	BB	(D)
23	APPAREL & OTHER TEXTILE PRODUCTS . . . . .	14	2	.3	1.6	.2	.4	1.1	4.9	1.4	6.3	(D)	(NA)	(NA)
24	LUMBER AND WOOD PRODUCTS . . . . .	481	139	14.6	117.5	13.1	24.9	102.6	262.9	352.6	609.0	24.9	11.2	121.8
2411	LOGGING CAMPS & LOGGING CONTRACTORS . . . . .	251	39	2.9	22.5	2.6	4.6	20.6	38.9	57.5	96.8	5.6	2.7	30.8
242	SAWMILLS AND PLANING MILLS . . . . .	130	62	6.9	58.6	6.3	11.9	52.2	141.9	175.2	310.8	16.0	6.8	73.6
2421	SAWMILLS AND PLANING MILLS, GENERAL . . . . .	114	59	6.7	57.8	6.1	11.7	51.5	140.2	173.9	307.7	15.8	6.7	73.0
243	MILLWORK, PLYWOOD & STRUC. MEMBERS . . . . .	40	20	2.4	19.4	2.2	4.3	16.2	44.2	53.9	97.5	1.5	1.5	15.6
245	WOOD BUILDINGS AND MOBILE HOMES . . . . .	15	14	2.0	15.7	1.8	3.5	12.0	32.5	60.9	93.2	1.5	(NA)	(NA)
27	PRINTING AND PUBLISHING . . . . .	115	15	1.5	11.0	.8	1.5	6.1	22.1	7.1	29.2	.7	1.5	15.6
2711	NEWSPAPERS . . . . .	50	11	1.1	7.8	.5	1.0	4.1	16.8	4.0	20.7	.4	1.2	11.7
28	CHEMICALS AND ALLIED PRODUCTS . . . . .	13	5	1.5	14.9	1.0	2.1	10.4	58.5	81.3	139.8	4.8	4.4	110.7
32	STONE, CLAY, AND GLASS PRODUCTS . . . . .	73	15	1.0	8.2	.7	1.4	5.2	20.5	14.2	35.1	2.2	.9	12.1
327	CONCRETE, GYPSUM, PLASTER PRODUCTS . . . . .	54	12	.9	7.0	.6	1.2	4.3	15.9	13.2	28.9	1.9	.8	9.5
3272	CONCRETE PRODUCTS, NEC . . . . .	17	3	.3	1.8	.2	.4	1.2	4.0	2.6	6.5	(D)	.2	2.6
3273	READY-MIXED CONCRETE . . . . .	30	8	.6	4.9	.4	.7	2.9	11.0	10.2	21.1	1.6	.5	6.0
34	FABRICATED METAL PRODUCTS . . . . .	40	19	1.3	9.3	1.0	1.7	6.2	22.7	24.9	47.1	.8	.6	8.0
344	FABRICATED STRUCTURAL METAL PROD . . . . .	24	12	.5	4.6	.4	.8	3.3	8.4	11.6	19.5	.3	.5	6.0
35	MACHINERY, EXCEPT ELECTRICAL . . . . .	80	14	.8	6.0	.6	1.2	4.4	11.0	9.2	19.5	.4	.9	10.1
352	FARM AND GARDEN MACHINERY . . . . .	20	7	.4	2.7	.3	.6	1.9	4.9	5.3	9.5	(D)	(NA)	(NA)
3523	FARM MACHINERY AND EQUIPMENT . . . . .	20	7	.4	2.7	.3	.6	1.9	4.9	5.3	9.5	(D)	(NA)	(NA)
--	ADMINISTRATIVE AND AUXILIARY . . . . .	22	9	1.6	21.0	-	-	-	-	-	-	-	.1	-

Note: The following symbols indicate employment size range for 1967:

AA less than 250 employees

EE 1,000 to 2,499 employees

BB 250 to 499 employees

FF 2,500 employees and over

CC 500 to 999 employees

- Represents zero.

NA Not available.

(D) Withheld to avoid disclosing figures for individual companies.

<sup>1</sup>The total cost of materials and value of shipments for industry groups shown may include extensive duplication arising from shipments between establishments in the same industry classification. (For a more complete explanation, see appendix.)<sup>2</sup>Includes figures for industry groups which have been withheld from publication in order to a) avoid disclosing figures for individual companies or b) permit further checking of figures for smaller industry groups. Additional detail will appear in the final report for this State.

## Appendix A. SCOPE AND COVERAGE

This report is one of a series presenting preliminary information, by State, from the 1972 Census of Manufactures. The data will be superseded in a final report which, in turn, will be included in *Volume III, Area Statistics, 1972 Census of Manufactures*. The final report will include a comprehensive discussion of the concepts and definitions used in the census.

The census of manufactures covers each manufacturing establishment in the United States with one paid employee or more; manufacturing establishments with no employees are excluded. Firms which operated more than one establishment were required to file a separate report for each location. Companies which engaged in distinctly different lines of activity at one location were asked to submit separate reports if the company records permitted such a separation and the activities were of significant size.

This report includes figures for administrative offices, warehouses, garages, or other auxiliary units which service manufacturing establishments.

In the 1972 census, the approximately 120,000 manufacturing establishments with fewer than 10 employees were excused from filing reports. Under special arrangements which safeguarded the confidentiality of both tax and census records, data on payrolls, sales, and industry classification from the administrative records of the Social Security Administration and the Internal Revenue Service were made available to the Census Bureau for use in the 1972 Economic Censuses (retail and wholesale trade, service industries, construction industries, manufactures, and mineral industries). Estimates for data other than payrolls and sales for these small establishments were constructed from industry averages. The effect on industry aggregates is slight in most industries. For manufacturing as a whole, these small establishments account for less than 3 percent of the payrolls and value added.

Establishments are classified by industry in accordance with industry definitions described in the 1972 edition of the Standard Industrial Classification (SIC) Manual. For 1972, the SIC was significantly revised and the comparability with prior year's data for some industries was significantly affected. The comparability at the 2- and 3-digit SIC levels was less affected. The final volumes of the 1972 Census of Manufactures will contain a table relating aggregates based on the 1972 SIC with aggregates derived from classifying establishments according to the 1967 SIC definitions.

As in earlier censuses, a number of small establishments may have been misclassified as to industry. However, such possible misclassifications have significant effect on *none* of the statistics except the number of establishments. As indicated above, report forms were not mailed to very small establishments (fewer than 10 employees). The industry classifications for these establishments were assigned on the basis of brief descriptions of the general activity of the establishment. Where the description is incomplete or there are relatively fine lines of demarcation among industries or between manufacturing and nonmanufacturing activity, the code assigned to an establishment could differ from that which would have been assigned on the basis of more complete product information. Therefore, the total establishment count for individual industries should be viewed as an approximation rather than a precise measurement. The counts for establishments with 20 employees or more are more reliable than the total number of establishments.

More detailed figures for this State will appear in the final census reports. Final reports will also include a comprehensive discussion of such concepts as "industry" and "establishment," as well as the various statistical items such as "employment," "value of shipments," and "value added." Similar preliminary and final reports will be issued for other States during the coming months. A series of preliminary summary reports showing U.S. totals for each manufacturing industry and for each State are being issued. Final industry reports and final area reports will be published during 1974.

Order forms describing the individual reports and listing their prices may be obtained from any U.S. Department of Commerce district office or from the Publications Distribution Section, Social and Economic Statistics Administration, Washington, D.C. 20233.

The 1972 Census of Manufactures is the 29th census of manufacturing establishments in the United States. For 1972, it was conducted jointly with the censuses of mineral industries, construction industries, retail trade, wholesale trade, and selected services under authority of Title 13 of the United States Code. Title 13 specifies that a census of manufactures be conducted every 5 years and, as amended, to cover years ending in "2" and "7". Title 13 also authorizes an annual sample survey of manufacturing establishments in interim years.



## Appendix B. EXPLANATION OF TERMS

*(For a more complete discussion of these terms and the method of compiling the Census of Manufactures, see the "Introduction" to the 1967 Census of Manufactures, Volume III).*

**All Employees**—All full-time and part-time employees on the payrolls of operating manufacturing establishments for any part of the pay period ending nearest the 12th of the months specified on the report form. Included are all persons on paid sick leave, paid holidays, and paid vacations during these pay periods. Officers of corporations are included as employees; proprietors and partners of unincorporated firms are excluded. The "all employee" number is the average number of production workers for the midmonth payroll period of March, May, August, and November plus the number of nonproduction employees in mid-March.

**Number of Production Workers**—Workers (up through the working foreman level) engaged in fabricating, processing, assembling, inspecting, receiving, packing, warehousing, shipping (but not delivering), and maintenance, repair, janitorial, and watchman services, product development, auxiliary production for plant's own use (e.g., powerplant), recordkeeping, and other closely associated services. Proprietors and partners are excluded.

**Payroll**—This item includes all forms of compensation such as salaries, wages, commissions, dismissal pay, bonuses, vacation and sick leave pay, and compensation in kind, prior to such deductions as employees' Social Security contributions, withholding taxes, group insurance, union dues, and savings bonds. The total includes salaries of officers of these establishments, if a corporation; it excludes payments to the proprietor or partners, if an unincorporated concern. Respondents were told that in reporting they could follow the definition of payrolls used for calculating the Federal withholding tax.

**Man-Hours of Production Workers**—This total relates to production-worker man-hours worked or paid for at the plant including actual overtime hours (not straight-time equivalent hours). It excludes hours paid for vacation, holidays, or sick leave when the employee was not at the plant.

**Cost of Materials**—The term "Cost of Materials" refers to charges actually paid or payable for items consumed or put into production during the year, including freight and other direct charges incurred by the establishment in acquiring these materials. It includes the cost of materials or fuel consumed regardless of

whether these items were purchased by the establishment from other companies, transferred to it from other establishments of the same company, or withdrawn from inventory during the year. The establishment was requested to value materials transferred from other parts of the company at its approximate market value, not at cost of production. The important components of this cost item are (a) all raw materials, semifinished goods, parts, components, containers, scrap, and supplies put into production or used as operating supplies and for repair and maintenance during the year; (b) electric energy purchased; (c) fuels consumed for heat, power, or the generation of electricity; (d) work done by others on materials or parts furnished by manufacturing establishments (contract work); and (e) products bought and resold in the same condition.

**Value of Shipments**—The value of shipments is the received or receivable net selling value, f.o.b. plant (exclusive of freight and taxes), of all products shipped, both primary and secondary, as well as all miscellaneous receipts such as receipts for contract work performed for others, installation and repair, sales of scrap, and sale of products bought and resold without further processing. Included are all items made by the establishment or for it under contract from materials owned by it whether sold, transferred to other plants of the same company, or shipped on consignment. The net selling value of products made in one plant on a contract basis from materials owned by another was reported by the plant providing the materials.

In the case of multiunit companies, the manufacturer was requested to report the value of products transferred to other establishments of the same company at full economic value; i.e., to include not only the direct costs of production but also a reasonable proportion of "all other costs" (including company overhead) and profit.

**Duplication in Cost of Materials and Value of Products**—The aggregate cost of materials and value-of-shipments figures for industry groups and for all manufacturing industries may include large amounts of duplication since the products of some industries are used as materials by others. With some important exceptions, such as motor vehicles and parts, this duplication is not significant within individual industries but arises from the addition of the totals of related industries in successive stages of the production of a finished manufactured product. Examples are the addition of flour mills to bakeries in the food group and the addition of pulp mills to paper mills in the paper and allied products group of industries. Esti-



mates of this duplication indicate that the value of manufactured products exclusive of such duplication—the value of finished manufactures—approximates two-thirds of the total value of products.

Prior to 1962, the Bureau of the Census did not publish figures for cost of materials or value of shipments if they contained significant duplication. Effective with the 1962 annual survey these figures were shown at all industry levels for the United States to meet the requests for their use in studies in which the presence of an indeterminate amount of duplication is not a limiting factor. However, they are appropriately footnoted. Effective with the 1964 annual survey, these industry group totals are also shown at the State, standard metropolitan statistical area, and large-county level.

Even where there is no significant amount of duplication, value-of-shipments figures are deficient as measures of the relative economic importance of individual manufacturing industries or geographic areas because of the wide variation in ratio of materials, labor, and other processing costs to value of shipments among industries.

**Value Added by Manufacture**—This measure of manufacturing activity is derived by subtracting the cost of materials, supplies, containers, fuel, purchased electricity, and cost of resale contract work from the value of shipments for products manufactured plus resale and receipts for services rendered. The result of this calculation is adjusted by the net change in finished goods and work-in-process inventories between the beginning and end of the year. (In the few industries that report value of production rather than value of shipments, only changes in work-in-process inventories are used to adjust value added. In the shipbuilding and repairing industry, no inventory adjustment is made.)

“Value added” avoids the duplication in the value of shipments figure which results from the use of products of some establishments as materials by others. Value added is considered to be the best value measure available for comparing the relative economic importance of manufacturing among industries and geographic areas.

**Expenditures for Plant and Equipment**—Manufacturing establishments in operation and establishments under construction but not yet in operation, were asked to report their expenditures for (a) permanent additions and major alterations to the manufacturing establishment, and (b) new machinery and equipment used for replacement purposes and additions to plant capacity if they are of the type for which depreciation accounts are ordinarily maintained.

These totals exclude expenditures for new facilities and equipment leased from nonmanufacturing concerns; new facilities owned by the Federal Government but operated under contract by private companies; and plant and equipment furnished to the manufacturer by communities and nonprofit organizations. Expenditures for used plant and equipment (although reported in the census), expenditures for land, and cost of maintenance and repairs charged as current operating expense are also omitted from the figures for new capital expenditures.

**Central Administrative Offices and Auxiliary Units**—In the 1972 census as in previous years, respondents were asked to file separate reports for central administrative offices or auxiliary units which were (1) at different locations from the establishments served or, (2) at the same location as one of these establishments but were not operated as an integral part thereof and served two or more establishments. The functions of employees in central administrative offices include general company policy determination, planning and management (that is, company purchasing, accounting, general engineering, direction of company personnel matters, and legal and patent matters). Auxiliaries are storage facilities, garages, repair shops, purchasing offices, sales promotion offices, and research laboratories serving the plants or central management of the company.

**Standard Metropolitan Statistical Areas**—Standard metropolitan statistical areas (SMSA) are integrated economic and social units with a large volume of daily travel and communication between the central city and outlying parts of the area.<sup>1</sup> Each area (except in New England) consists of one whole county or more. An area may contain not only highly industrialized counties but also adjoining counties which, though primarily residential in character, contribute significantly to the industrial counties' labor force and are socially and economically integrated with the central city. These areas are defined by the Federal Committee on Standard Metropolitan Statistical Areas of the Office of Management and Budget for general-purpose use throughout the Federal Government in presenting economic and social data. In the New England States, similar intergration criteria are applied in defining

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<sup>1</sup> Each standard metropolitan statistical area must include either (1) a city with 50,000 or more inhabitants, or (2) a city having a population of at least 25,000 which (a) with the addition of the population of contiguous places has a population density of at least 1,000 persons per square mile; (b) constitutes, for general economic and social purposes, a single community with a combined population of at least 50,000; and (c) includes a total population of at least 75,000 in the county or counties in which the city and contiguous places are located.



SMSA's on a city and town basis because towns rather than counties are regarded as the significant unit in this region of the country.

The requirement that each SMSA consist of county units (except in New England) sometimes results in the inclusion in an area of considerable amount of territory which would not ordinarily be considered "metropolitan," much less "industrial." It is recognized that metropolitan areas could be more accurately defined in terms of smaller area segments such as minor civil

divisions, but the usefulness of areas so defined would be limited by the fact that many types of economic and social data are available only on a county basis.

Each SMSA is designated by the name of the principal city of the area. In addition to the name of the principal city, the area title may include one or two additional city names.

The data for SMSA's which changed definition since the 1967 census have not been retabulated on the new basis for years prior to 1972.

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PRELIMINARY REPORT  
**1972 CENSUS OF  
MANUFACTURES**  
AREA SERIES**Illinois**

Value added by manufacturing in 1972 in the State of Illinois amounted to \$25,759 million, an 11-percent increase from 1971 and a 29-percent increase from 1967.

This report presents preliminary results from the 1972 Census of Manufactures for the State, its Standard Metropolitan Statistical Areas, and its counties.

Data are provided for industry groups within the State. Historical data, back to 1958, are included for the State as a whole,

and 1967 figures on employment and value added are provided for the smaller areas.

The figures in this report have been subjected to only preliminary review and must be regarded as approximations of the final census figures. No adjustments have been made in the value figures for changes in price level.

For an explanation of the terms used in the tables, see the appendix at the end of this report.

**TABLE 1. General Statistics for the State: 1972 and Earlier Years**

(See appendix, Explanation of Terms)

Year	Establishments		All employees <sup>1</sup>		Production workers			Value added by manufacture	Cost of materials <sup>2</sup>	Value of shipments <sup>2</sup>	Capital expenditures, new
	Total (number)	With 20 employees or more (number)	Number (1,000)	Payroll (million dollars)	Number (1,000)	Man-hours (millions)	Wages (million dollars)	(million dollars)	(million dollars)	(million dollars)	(million dollars)
ILLINOIS											
1972 Census .....	18,481	7,282	1,310.1	12,867.3	896.8	1,776.7	7,651.0	25,759.0	28,376.3	53,698.9	1,486.9
1971 ASM .....	(NA)	(NA)	1,282.2	11,701.6	871.2	1,708.9	6,875.9	22,789.8	25,109.0	47,939.6	1,476.3
1970 ASM .....	(NA)	(NA)	1,356.9	11,552.2	929.0	1,844.0	6,835.5	22,379.0	24,525.8	46,705.1	1,515.4
1969 ASM .....	(NA)	(NA)	1,408.0	11,324.9	989.7	1,976.7	6,920.9	22,642.0	23,718.4	46,040.4	1,492.5
1968 ASM .....	(NA)	(NA)	1,387.9	10,542.1	977.0	1,955.4	6,468.7	21,196.4	22,454.0	43,675.1	1,494.2
1967 Census .....	18,536	7,477	1,397.3	10,013.9	995.1	1,978.8	6,180.0	20,016.5	21,559.6	41,333.7	1,493.4
1966 ASM .....	(NA)	(NA)	1,404.8	9,733.6	1,012.9	2,054.8	6,156.5	19,855.2	21,987.3	41,323.8	1,468.7
1965 ASM .....	(NA)	(NA)	1,319.6	8,803.9	940.9	1,915.4	5,531.0	17,743.8	19,527.7	37,005.1	1,148.0
1964 ASM .....	(NA)	(NA)	1,250.4	8,141.1	885.3	1,806.0	5,052.8	16,012.0	17,586.5	33,401.2	914.4
1963 Census .....	18,593	6,974	1,211.2	7,560.6	855.9	1,717.0	4,655.4	14,641.5	(NA)	(NA)	775.6
1962 ASM .....	(NA)	(NA)	1,195.1	7,198.3	837.5	1,697.8	4,440.6	13,676.2	(NA)	(NA)	768.5
1961 ASM .....	(NA)	(NA)	1,170.6	6,811.2	815.6	1,626.5	4,137.4	12,730.2	(NA)	(NA)	702.3
1960 ASM .....	(NA)	(NA)	1,209.2	6,846.5	847.7	1,705.3	4,233.6	12,642.2	(NA)	(NA)	718.8
1959 ASM .....	(NA)	(NA)	1,222.1	6,806.7	873.1	1,757.3	4,264.6	12,871.6	(NA)	(NA)	665.8
1958 Census .....	18,468	6,586	1,189.9	6,224.8	835.2	1,631.8	3,833.5	11,664.1	(NA)	(NA)	730.7

Note: "ASM" data are based on a representative sample of manufacturing establishments canvassed in the Annual Survey of Manufactures. These estimates may differ from the results of a complete canvass of all manufacturing establishments. The standard errors associated with these estimates are published in the annual survey of manufactures volumes for this period. For comparative purposes, the 1972 ASM estimate for the State of Illinois was 1,307 thousand employees, and \$25,582 million in value added with corresponding standard error of estimate of 1 and 1.

(NA) Not available.

<sup>1</sup>Includes employment and payroll at central administrative offices and auxiliary units. (For a definition of these units, see appendix.)

<sup>2</sup>The total cost of materials and value of shipments may include extensive duplication arising from shipments between establishments in the same industry classification. (For a more complete explanation, see appendix.)

TABLE 2. General Statistics for the State, Standard Metropolitan Statistical Areas, and Counties: 1972 and 1967

(See appendix, Explanation of Terms)

State, standard metropolitan statistical areas, and counties <sup>1</sup>	1972											1967	
	Establishments		All employees <sup>2</sup>		Production workers			Value added by manufacture	Cost of materials <sup>3</sup>	Value of shipments <sup>3</sup>	Capital expenditures, new	All employees	Value added by manufacture
	Total	With 20 employees or more	Number	Payroll	Number	Man-hours	Wages						
	(number)	(number)	(1,000)	(million dollars)	(1,000)	(million)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(1,000)	(million dollars)
ILLINOIS, TOTAL . . . . .	18 481	7 282	1 310.1	12 867.3	896.8	1 776.7	7 651.0	25 759.0	28 376.3	53 698.9	1 486.9	1 397.3	20 016.5
CHICAGO-IL-NORTHWESTERN INDIANA STANDARD CONSOLIDATED AREA <sup>4</sup> . . . . .	14 318	5 667	1 016.5	10 292.4	682.6	1 353.4	5 994.8	19 835.9	21 318.4	40 865.7	1 174.1	1 088.1	15 561.9
STANDARD METROPOLITAN STATISTICAL AREAS <sup>4</sup>													
BLOOMINGTON-NORMAL . . . . .	93	38	6.5	54.6	4.5	8.3	32.1	143.4	161.0	287.6	13.5	6.4	97.6
CHAMPAIGN-URBANA-RANTOUL . . . . .	98	35	4.4	36.7	2.9	4.9	20.2	78.0	314.8	389.6	11.9	5.6	60.6
CHICAGO . . . . .	13 866	5 459	916.3	9 142.5	605.1	1 200.3	5 171.8	17 679.8	17 719.4	35 170.7	1 007.6	983.1	13 755.3
DAVENPORT-ROCK ISLAND-MOLINE . . . . .	418	169	41.7	461.5	29.6	57.1	298.4	849.7	1 258.3	2 043.7	33.0	49.4	770.0
PORTION IN ILLINOIS . . . . .	258	104	26.8	297.1	18.8	35.3	184.8	552.8	714.4	1 204.5	12.9	33.0	517.4
PORTION IN IOWA . . . . .	160	65	14.9	164.4	10.8	21.8	113.6	296.9	543.9	839.2	20.3	16.3	252.6
DECATUR . . . . .	139	57	19.6	210.6	14.1	27.6	141.3	445.6	662.0	1 106.4	41.3	18.5	372.4
PEORIA . . . . .	365	146	45.2	521.7	30.0	58.8	309.0	1 038.6	861.5	1 083.6	64.8	46.6	765.4
ROCKFORD . . . . .	645	245	53.3	519.6	38.4	79.0	330.8	1 084.4	1 185.4	2 245.0	46.2	57.7	832.5
ST. LOUIS . . . . .	3 166	1 235	256.8	2 547.4	166.2	335.2	1 497.4	5 133.4	6 660.0	11 665.2	228.8	296.9	4 176.1
PORTION IN ILLINOIS . . . . .	444	171	42.0	418.0	30.1	64.1	304.9	937.5	1 604.6	2 540.2	78.7	55.0	929.6
PORTION IN MISSOURI . . . . .	2 722	1 064	214.8	2 144.4	136.1	269.1	1 192.5	4 195.9	5 055.4	9 125.0	150.1	241.9	3 246.5
SPRINGFIELD . . . . .	129	41	10.3	102.9	6.6	13.5	58.9	236.1	218.7	455.1	19.5	11.1	159.6
COUNTIES													
ADAMS . . . . .	94	42	14.9	109.5	8.9	17.3	56.8	219.3	342.4	543.3	8.7	10.4	154.3
ALEXANDER . . . . .	18	6	1.1	6.4	.9	1.8	5.2	12.5	13.4	25.4	1.2	1.1	9.4
BOND . . . . .	17	6	.4	3.3	.3	.6	1.9	9.0	10.5	19.4	.2	.4	13.2
BUREAU . . . . .	54	18	2.7	18.5	2.3	4.1	12.7	47.1	52.6	95.6	1.9	2.6	30.5
CARROLL . . . . .	21	8	1.2	9.3	.7	1.4	5.3	20.5	30.8	48.3	1.9	.9	5.5
CASS . . . . .	22	10	1.5	13.3	1.2	2.2	10.2	21.4	92.4	113.9	.8	.7	5.5
CHAMPAIGN . . . . .	98	35	4.4	36.7	2.9	4.9	20.2	78.0	314.8	389.6	11.9	5.6	60.6
CHRISTIAN . . . . .	37	19	2.2	15.2	1.6	3.3	10.2	37.9	112.4	149.8	2.1	1.6	21.2
CLARK . . . . .	20	7	.6	4.1	.5	.9	2.8	18.0	8.7	26.4	.6	(0)	(0)
CLAY . . . . .	19	5	1.2	7.6	1.1	2.4	6.5	15.4	22.0	35.6	1.0	.9	7.7
COLES . . . . .	55	27	4.9	39.3	4.0	8.1	29.2	127.2	68.9	196.0	11.5	4.1	59.0
COOK . . . . .	11 324	4 471	749.1	7 512.1	495.0	983.2	4 247.2	14 634.1	14 531.0	29 001.0	701.1	831.1	11 640.4
CUMBERLAND . . . . .	13	3	.4	1.8	.4	.6	1.4	2.8	2.5	5.2	(0)	.5	2.5
DE KALB . . . . .	94	42	7.9	68.1	5.9	11.6	43.3	127.9	169.5	291.3	5.7	8.8	116.4
DE WITT . . . . .	16	6	1.0	8.0	.8	1.5	6.1	19.5	26.3	44.6	1.1	1.0	18.8
DOUGLAS . . . . .	24	9	1.6	16.0	1.1	2.2	10.4	86.8	30.4	119.4	(0)	1.9	50.6
DU PAGE . . . . .	931	320	37.4	370.9	22.8	45.1	180.0	630.8	548.2	1 165.6	47.8	24.5	308.3
EDGAR . . . . .	29	14	2.7	18.4	2.1	4.2	12.0	28.1	49.9	77.3	.8	2.6	20.8
EFFINGHAM . . . . .	31	9	2.9	21.3	2.4	4.6	17.2	51.4	70.2	118.4	15.0	2.0	14.7
FAYETTE . . . . .	25	7	1.0	6.4	.9	1.8	5.3	9.6	17.2	26.8	.7	1.1	7.7
FORD . . . . .	22	8	.8	4.9	.6	1.1	3.5	16.1	51.6	65.0	1.9	1.0	10.5
FRANKLIN . . . . .	35	10	.9	5.1	.7	1.3	3.6	11.8	13.5	23.7	.6	.8	7.3
GALLATIN . . . . .	10	4	.3	1.5	.3	.6	1.2	4.4	4.1	8.6	.1	.3	4.1
GREENE . . . . .	21	4	.4	2.9	.3	.6	2.0	4.8	3.8	8.7	.4	.6	4.4
GRUNDY . . . . .	36	22	2.5	24.4	1.8	4.0	16.8	67.3	90.6	138.4	15.7	2.0	24.8
HAMILTON . . . . .	8	3	.3	1.4	.3	.6	1.3	2.5	1.2	3.9	.1	.4	2.5
HANCOCK . . . . .	34	11	.5	3.4	.4	.8	2.4	7.9	11.0	20.4	.3	.6	5.3
HENRY . . . . .	62	27	3.0	23.7	2.0	3.6	14.6	60.9	56.2	117.7	2.4	2.9	35.1
IREQUOIS . . . . .	33	16	2.3	14.6	1.9	3.9	11.5	32.6	29.9	62.1	1.2	1.7	20.6
JACKSON . . . . .	33	10	1.9	13.0	1.7	3.3	10.2	27.5	28.2	55.5	.8	1.8	19.8
JEFFERSON . . . . .	29	11	1.8	14.6	1.3	2.6	9.4	21.7	23.5	48.0	4.2	1.6	16.2
JERSEY . . . . .	10	3	.3	1.8	.2	.4	1.3	3.3	4.5	7.8	.3	.2	1.5
JO DAVIESS . . . . .	42	10	1.2	7.9	1.0	2.1	6.2	26.9	34.4	60.5	2.0	.8	6.7
KANE . . . . .	539	244	44.5	421.5	30.9	60.6	259.7	758.3	887.4	1 648.4	46.2	39.4	561.4
KANKAKEE . . . . .	101	49	10.9	112.8	7.8	16.1	73.4	366.5	380.9	741.5	21.8	12.2	223.8
KENDALL . . . . .	32	12	1.1	9.0	.9	1.9	6.4	16.5	13.1	28.9	1.1	(0)	(0)
KNOX . . . . .	55	24	8.6	77.5	7.1	14.4	62.1	161.9	242.7	398.9	5.0	7.8	104.4
LAKE . . . . .	542	204	43.7	446.4	25.7	50.9	222.1	871.0	681.8	1 546.5	41.9	41.4	566.5
LA SALLE . . . . .	147	75	15.7	145.0	12.5	24.4	109.3	293.7	288.2	578.2	32.9	17.0	237.1
LEE . . . . .	38	18	2.0	17.4	1.5	3.2	12.6	46.6	39.2	84.5	2.2	2.4	37.4
LIVINGSTON . . . . .	49	22	3.8	29.2	3.3	6.3	22.1	52.9	58.2	110.5	2.2	2.7	30.9
LOGAN . . . . .	30	11	2.4	19.5	2.0	4.1	15.5	99.8	69.6	165.2	2.6	2.1	65.0
MC DONOUGH . . . . .	34	14	2.0	16.0	1.7	3.4	12.7	35.7	28.3	62.9	3.8	1.9	24.9
MC HENRY . . . . .	275	105	16.9	133.4	12.9	24.4	86.9	275.8	348.0	607.4	21.4	16.6	216.6
MC LEAN . . . . .	93	38	6.5	54.6	4.5	8.3	32.1	143.4	161.0	287.6	13.5	6.4	97.6
MACON . . . . .	139	57	19.6	210.6	14.1	27.6	141.3	445.6	662.0	1 106.4	41.3	18.5	372.4
MACOUPIN . . . . .	34	11	1.0	7.1	.8	1.6	5.1	15.0	19.8	34.1	.7	.8	8.7
MADISON . . . . .	207	84	30.2	314.0	23.6	46.1	226.4	704.1	1 207.4	1 908.9	65.7	36.3	645.2
MARTIN . . . . .	46	19	3.3	23.1	2.6	5.1	15.9	56.2	41.8	93.2	4.3	2.1	24.1
MARSHALL . . . . .	13	6	.7	4.1	.6	1.0	4.3	21.3	28.0	49.2	(0)	1.0	13.1
MASON . . . . .	18	8	.6	6.4	.5	1.0	2.2	13.2	16.6	29.7	.4	.3	4.3
MASSAC . . . . .	14	5	.8	5.8	.6	1.2	4.1	23.4	14.6	36.9	2.7	1.0	11.9
MONTGOMERY . . . . .	41	15	1.6	10.9	1.3	2.5	7.6	23.7	35.4	58.2	1.4	1.8	15.0
MORGAN . . . . .	43	16	3.7	27.6	2.7	5.0	18.0	127.9	108.4	236.0	3.7	2.9	55.1
MOULTRIE . . . . .	20	11	.9	6.2	.7	1.2	3.5	14.7	16.7	31.0	.1	.9	10.1
OGLE . . . . .	75	30	6.2	57.0	4.9	10.7	40.4	106.0	233.2	337.2	11.2	5.7	71.2
PEORIA . . . . .	243	98	25.9	299.3	14.8	29.8	141.0	444.9	453.9	888.9	16.1	23.8	336.2
PERRY . . . . .	28	13	2.3	16.0	1.7	3.5	10.7	27.1	44.1	71.7	1.9	1.8	20.0
PIATT . . . . .	13	5	.6	4.6	.5	.9	3.3	26.0	23.8	47.8	1.6	(0)	(0)
PIKE . . . . .	23	6	1.5	9.0	1.2	2.6	8.1	11.4	33.4	44.1	.9	.7	5.5
RANDOLPH . . . . .	30	11	2.9	22.8	2.6	4.9	19.7	56.5	59.1	115.2	2.5	2.6	30.3
RICHLAND . . . . .	26	8	2.0	14.5	1.7	3.3	10.5	16.6	32.5	48.4	(0)	1.5	15.2
ROCK ISLAND . . . . .	196	77	23.8	273.4	16.8	31.7	170.2	491.9	658.2	1 086.8	10.5	30.1	482.3
ST. CLAIR . . . . .	200	81	11.4	109.1	8.8	17.1	76.0	226.3	386.4	614.2	12.2	17.3	267.3

See footnotes at end of table.



TABLE 2. General Statistics for the State, Standard Metropolitan Statistical Areas, and Counties: 1972 and 1967—Continued

(See appendix, Explanation of Terms)

State, standard metropolitan statistical areas, and counties¹	1972											1967	
	Establishments		All employees²		Production workers			Value added by manufac- ture	Cost of materials³	Value of shipments³	Capital expendi- tures, new	All employees	Value added by manufac- ture
	Total	With 20 employees or more	Number	Payroll	Number	Man-hours	Wages						
	(number)	(number)	(1,000)	(million dollars)	(1,000)	(million)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(1,000)	(million dollars)
COUNTIES-CONTINUED													
SALINE . . . . .	18	4	0.3	2.4	0.2	0.3	1.4	4.2	4.8	8.9	0.2	0.4	3.4
STEPHENSON . . . . .	62	24	9.1	76.3	6.4	13.0	46.9	161.9	110.0	268.5	7.7	8.9	120.8
TAZEWELL . . . . .	97	38	18.5	216.8	14.6	27.9	164.0	577.5	388.6	960.3	48.0	22.1	419.8
UNION . . . . .	14	7	1.1	7.7	1.0	1.9	6.3	20.0	18.9	38.8	2.0	.8	9.4
VERMILION . . . . .	115	66	14.4	137.8	11.1	22.9	98.8	287.4	356.5	642.2	21.5	13.9	195.6
WABASH . . . . .	12	5	1.0	8.6	.8	1.7	6.3	30.0	10.1	40.1	1.0	1.1	18.4
WARREN . . . . .	26	10	1.3	9.3	1.0	2.0	6.8	16.8	71.7	88.6	1.6	1.0	14.6
WASHINGTON . . . . .	12	6	.4	2.8	.4	.7	2.2	10.4	10.5	20.6	.1	.6	2.3
WHITE . . . . .	19	6	.5	2.2	.4	.7	1.6	3.8	3.8	7.4	.1	.6	4.0
WHITESIDE . . . . .	71	30	9.9	112.2	8.0	16.8	84.2	237.0	220.7	458.0	10.4	8.9	143.1
WILL . . . . .	255	115	24.7	258.2	17.8	36.1	175.9	509.8	723.0	1 201.8	149.2	30.1	462.1
WILLIAMSON . . . . .	41	13	4.0	29.2	3.3	6.2	22.4	49.9	66.3	112.2	2.7	4.1	38.2
WOODFORD . . . . .	25	10	.8	5.6	.6	1.2	4.0	16.2	19.0	34.4	.7	.7	9.4

(D) Withheld to avoid disclosing figures for individual companies.

<sup>1</sup>Some counties were withheld from publication in order to a avoid disclosing figures for individual companies or b permit further checking of the figures for smaller counties. Additional detail will appear in the final report for this State.<sup>2</sup>Includes employment and payroll at central administrative offices and auxiliary units. (For a definition of these units, see appendix.)<sup>3</sup>The total cost of materials and value of shipments may include extensive duplication arising from shipments between establishments in the same industry classification. For a more complete explanation, see appendix.)<sup>4</sup>The standard consolidated area and standard metropolitan statistical areas are defined as follows:

CHICAGO, IL-NORTHWESTERN INDIANA SCA: Consists of Chicago, IL, SMSA and Gary-Hammond-East Chicago, IN SMSA Lake and Porter Counties, IN

BLOOMINGTON-NORMAL SMSA: Coextensive with McLean County, IL.

CHAMPAIGN-URBANA-RANTOUL SMSA: Coextensive with Champaign County, IL.

CHICAGO SMSA: Consists of Cook, Du Page, Kane, Lake, McHenry, and Will Counties, IL.

DAVENPORT-ROCK ISLAND-MOLINE, IA-IL, SMSA: Consists of Scott County, IA, and Henry and Rock Island Counties, IL.

DECATUR SMSA: Coextensive with Macon County, IL.

PEORIA SMSA: Consists of Peoria, Tazewell, and Woodford Counties, IL.

ROCKFORD SMSA: Consists of Boone and Winnebago Counties, IL.

ST. LOUIS, MO-IL, SMSA: Consists of St. Louis city, and Franklin, Jefferson, St. Charles, and St. Louis Counties, MO, and Clinton, Madison, Monroe, and St. Clair Counties, IL.

SPRINGFIELD SMSA: Consists of Menard and Sangamon Counties, IL.

TABLE 3. General Statistics for the State, by Industry Groups and Industries: 1972 and 1967

(See appendix, Explanation of Terms)

Code	Industry	1972										1967		
		Establishments		All employees		Production workers			Value added by manufacture	Cost of materials <sup>1</sup>	Value of shipments <sup>1</sup>	Capital expenditures, new	All employees	Value added by manufacture
		Total	With 20 employees or more	Number	Payroll	Number	Man-hours	Wages						
		(number)	(number)	(1,000)	(million dollars)	(1,000)	(million)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(1,000)	(million dollars)
	ALL INDUSTRIES, TOTAL <sup>2</sup> . . . . .	18 481	7 282	1 310.1	12 867.3	896.8	1 776.7	7 651.0	25 759.0	28 376.3	53 698.9	1 486.9	1 397.3	20 016.5
20	FOOD AND KINDRED PRODUCTS. . . . .	1 408	675	112.5	1 097.7	80.3	165.2	713.8	3 136.4	6 015.4	9 118.2	212.9	120.0	2 512.6
201	MEAT PRODUCTS. . . . .	248	101	16.9	167.9	13.8	28.1	129.2	315.2	1 570.9	1 881.2	35.6	16.3	204.3
2011	MEATPACKING PLANTS . . . . .	110	42	7.7	78.9	6.1	12.6	61.0	142.3	1 053.3	1 192.0	17.8	7.9	99.4
2013	SAUSAGES AND OTHER PREPARED MEATS. . . . .	117	49	7.8	80.9	6.4	13.1	61.8	161.1	488.5	648.5	15.7	7.4	96.0
2016	POULTRY DRESSING PLANTS. . . . .	13	5	.5	4.8	.8	1.6	4.0	5.6	16.4	21.7	(D)	(NA)	(NA)
2017	POULTRY AND EGG PROCESSING . . . . .	8	5	.5	3.3	.5	.9	2.4	6.2	12.7	18.9	(D)	(NA)	(NA)
202	DAIRY PRODUCTS. . . . .	187	107	9.2	88.1	5.2	9.3	41.9	236.2	642.8	876.0	17.1	10.1	189.1
2022	CHEESE, NATURAL AND PROCESSED. . . . .	40	14	2.1	17.0	1.7	2.5	9.3	25.5	227.5	250.7	(D)	1.0	12.1
2024	ICE CREAM AND FROZEN DESSERTS. . . . .	36	18	1.4	14.1	.7	1.4	7.3	27.1	53.2	80.1	3.5	1.7	24.2
2026	FLUID MILK . . . . .	81	58	4.7	47.8	2.0	3.8	19.2	124.8	281.7	406.0	6.9	6.5	129.2
203	PRESERVED FRUITS AND VEGETABLES. . . . .	119	55	10.1	83.2	7.7	16.1	56.4	230.6	300.0	529.8	27.1	(NA)	(NA)
2033	CANNED FRUITS AND VEGETABLES . . . . .	34	20	2.4	15.3	2.2	4.7	13.3	49.9	55.6	105.5	3.7	3.0	59.7
2035	PICKLES, SAUCES, AND SALAD DRESSINGS . . . . .	29	10	1.0	9.1	.7	1.4	5.1	24.7	53.2	77.3	4.5	1.0	10.9
2038	FROZEN SPECIALTIES . . . . .	38	17	3.8	33.2	2.6	5.3	19.6	89.5	97.6	187.1	13.1	(NA)	(NA)
204	GRAIN MILL PRODUCTS. . . . .	150	78	15.0	156.9	10.8	22.9	107.7	520.9	836.4	1 352.2	43.7	15.6	484.7
2041	FLOUR AND OTHER GRAIN MILL PRODUCTS. . . . .	19	11	1.7	16.8	1.3	2.7	12.2	53.0	154.8	203.9	2.5	2.1	50.2
2045	BLENDED AND PREPARED FLOUR . . . . .	15	10	1.6	12.0	1.1	2.5	8.9	27.2	73.3	99.6	1.3	1.1	20.8
205	BAKERY PRODUCTS. . . . .	187	88	18.6	173.3	12.5	25.6	109.8	421.7	275.6	702.6	11.2	20.7	304.8
2051	BREAD, CAKE, AND RELATED PRODUCTS. . . . .	162	18	12.1	116.5	7.0	13.9	64.1	228.4	155.8	385.0	8.1	FF	(D)
2052	COOKIES AND CRACKERS . . . . .	25	18	6.5	56.7	5.5	11.7	45.8	193.3	119.8	317.6	3.1	FF	(D)
206	SUGAR AND CONFECTIONERY PRODUCTS . . . . .	97	62	16.6	146.5	13.7	28.6	110.4	432.7	457.5	898.6	19.0	(NA)	(NA)
2065	CONFECTIONERY PRODUCTS . . . . .	88	55	14.2	124.0	11.8	24.6	95.0	345.8	319.9	661.4	14.1	15.6	234.7
207	FATS AND OILS. . . . .	49	34	5.0	56.6	3.5	7.7	35.4	196.9	1 068.5	1 251.9	22.6	(NA)	(NA)
2077	ANIMAL AND MARINE FATS AND OILS. . . . .	21	8	.5	6.3	.3	.8	3.3	15.6	36.7	52.0	1.1	.8	7.0
2079	SHORTENING AND COOKING OILS. . . . .	14	13	2.0	23.1	1.4	3.3	15.0	93.3	311.3	401.8	8.4	2.1	59.6
208	BEVERAGES. . . . .	160	76	12.5	143.9	7.1	14.1	74.8	481.5	528.2	996.3	23.5	13.4	400.0
2085	DISTILLED LIQUOR, EXCEPT BRANDY. . . . .	7	6	2.3	30.0	1.8	3.2	22.3	96.3	138.7	234.1	2.7	2.5	80.6
2086	BOTTLED AND CANNED SOFT DRINKS . . . . .	95	46	5.5	60.4	2.1	4.3	17.8	107.0	162.9	270.1	9.6	6.3	94.2
2087	FLAVORING EXTRACTS AND SIRUPS, NEC . . . . .	45	16	2.4	26.4	1.6	3.4	15.7	208.8	130.5	327.3	8.3	1.8	156.0
209	MISC. FOODS AND KINDRED PRODUCTS . . . . .	211	74	8.6	81.3	6.1	12.8	48.1	300.8	335.5	629.8	13.1	(NA)	(NA)
2095	ROASTED COFFEE . . . . .	10	4	.6	4.8	.5	1.0	3.6	25.1	49.4	75.4	.3	2.3	104.7
2099	FOOD PREPARATIONS, NEC . . . . .	142	52	6.5	66.0	4.4	9.3	37.5	238.2	255.4	491.6	11.4	6.2	147.9
22	TEXTILE MILL PRODUCTS. . . . .	81	35	3.8	31.7	3.1	7.0	21.5	66.3	99.4	163.6	4.2	5.5	50.5
225	KNITTING MILLS . . . . .	12	6	.7	3.7	.6	.9	3.0	8.2	5.1	13.1	.2	.9	6.4
226	TEXTILE FINISHING, EXCEPT WOOL . . . . .	12	5	.8	5.8	.7	1.4	4.1	10.5	6.4	16.9	.5	CC	(D)
229	MISCELLANEOUS TEXTILE GOODS. . . . .	34	16	1.1	9.4	.9	1.8	6.1	17.2	16.6	33.9	.7	3.1	30.1
23	APPAREL, OTHER TEXTILE PRODUCTS. . . . .	635	248	30.4	183.5	25.7	46.4	130.0	334.5	326.1	659.0	(D)	38.4	293.7
2311	MEN'S AND BOYS' SUITS AND COATS. . . . .	29	17	6.2	47.8	4.7	8.2	31.3	79.7	46.4	125.3	.7	8.7	72.8
232	MEN'S AND BOYS' FURNISHINGS. . . . .	56	25	3.2	15.7	2.8	4.8	11.7	26.1	29.4	55.5	.6	4.1	29.8
2321	MEN'S AND BOYS' SHIRTS AND NIGHTWEAR . . . . .	7	3	.6	2.4	.5	.9	1.9	4.1	3.1	7.4	(Z)	.5	3.0
2327	MEN'S AND BOYS' SEPARATE TROUSERS. . . . .	9	4	.3	1.4	.3	.5	1.2	3.0	5.1	8.0	(Z)	.7	5.8
2329	MEN'S AND BOYS' CLOTHING, NEC. . . . .	16	8	1.0	5.9	.9	1.5	4.3	7.8	9.9	17.8	.1	1.4	9.1
233	WOMEN'S, AND MISSES' OUTERWEAR . . . . .	139	74	7.7	43.6	6.6	11.5	31.6	77.7	65.1	142.3	.9	10.3	80.5
2335	WOMEN'S AND MISSES' DRESSES. . . . .	74	42	4.8	26.1	4.0	6.9	18.2	46.0	42.4	88.5	.3	7.1	49.2
2337	WOMEN'S AND MISSES' SUITS AND COATS. . . . .	36	17	1.7	11.1	1.5	2.6	8.2	18.0	14.7	32.5	.4	1.6	21.2
234	WOMEN'S, CHILDREN'S UNDERGARMENTS. . . . .	17	11	1.9	9.5	1.7	3.1	7.5	18.4	17.1	35.8	.3	2.9	21.3
235	HATS, CAPS, AND MILLINERY. . . . .	21	8	.6	3.3	.5	.8	2.5	6.5	4.2	10.3	.2	.8	5.8
238	MISC. APPAREL AND ACCESSORIES. . . . .	41	22	1.7	9.0	1.5	2.6	5.9	19.1	17.9	38.2	1.7	3.5	20.5
2389	APPAREL AND ACCESSORIES, NEC . . . . .	10	4	.4	1.9	.4	.6	1.5	1.6	2.3	5.4	(D)	1.2	5.8
239	MISC. FABRICATED TEXTILE PRODUCTS. . . . .	301	88	8.6	52.3	7.4	14.6	37.7	102.6	142.6	244.3	6.1	7.4	58.7
2391	CURTAINS AND DRAPERIES . . . . .	85	11	1.1	5.2	.9	1.8	3.9	8.4	8.8	17.2	.2	.9	6.2
2392	HOUSE FURNISHINGS, NEC . . . . .	69	30	2.6	15.5	2.2	4.4	10.5	32.5	44.1	75.7	.9	2.5	20.4
2394	CANVAS AND RELATED PRODUCTS. . . . .	36	5	.6	3.4	.5	1.0	2.3	5.8	6.7	12.2	.4	.5	4.2
2395	PLEATING AND STITCHING . . . . .	31	15	.8	3.9	.6	1.2	2.8	10.7	8.6	18.5	.2	.5	2.7
2396	AUTOMOTIVE AND APPAREL TRIMMINGS . . . . .	22	8	.8	7.0	.6	1.3	4.9	16.3	40.5	56.4	.3	1.9	15.4
2397	SCHIFFLI MACHINE EMBROIDERIES. . . . .	7	5	.4	2.0	.3	.7	1.2	2.8	.8	3.6	.2	.2	1.5
2399	FABRICATED TEXTILE PRODUCTS, NEC . . . . .	39	15	2.3	14.7	2.0	4.0	11.6	25.3	31.1	57.9	3.9	.9	7.8
24	LUMBER AND WOOD PRODUCTS . . . . .	575	140	12.8	99.5	10.1	19.3	65.9	179.6	198.7	377.2	11.1	(NA)	(NA)
242	SAWMILLS AND PLANING MILLS . . . . .	146	12	1.2	7.3	1.1	2.1	5.9	12.8	14.2	29.0	2.0	1.6	11.0
2421	SAWMILLS AND PLANING MILLS, GENERAL. . . . .	108	7	.7	3.9	.6	1.0	3.3	6.9	9.8	17.0	1.0	.8	5.8
2426	HARDWOOD DIMENSION AND FLOORING. . . . .	28	4	.4	2.8	.4	1.0	2.2	3.8	3.0	6.7	.8	(NA)	(NA)
243	MILLWORK, PLYWOOD, STRUC. MEMBERS. . . . .	201	53	3.8	32.4	3.0	5.4	21.5	57.7	76.8	133.2	2.7	(NA)	(NA)
2431	MILLWORK . . . . .	106	32	2.3	19.5	1.8	3.2	13.1	32.5	41.7	73.2	1.7	(NA)	(NA)
2448	WOOD PALLETS AND SKIDS . . . . .	12	8	.4	2.6	.4	.7	2.1	4.1	3.0	7.1	.3	(NA)	(NA)
2449	WOOD CONTAINERS, NEC . . . . .	12	4	.4	2.9	.3	.6	2.4	3.2	4.7	7.8	.2	(NA)	(NA)
245	WOOD BUILDINGS AND MOBILE HOMES. . . . .	20	15	1.3	11.5	.9	1.7	6.6	21.2	37.5	58.3	1.6	(NA)	(NA)
2451	MOBILE HOMES . . . . .	3	3	.3	1.9	.2	.3	1.2	2.6	7.2	9.6	(D)	(NA)	(NA)
2452	PREFABRICATED WOOD BUILDINGS . . . . .	17	12	1.0	9.7	.7	1.4	5.3	18.6	30.4	48.7	(D)	(NA)	(NA)
249	MISCELLANEOUS WOOD PRODUCTS. . . . .	140	44	5.5	41.1	4.2	8.4	26.2	78.1	59.7	136.5	4.1	(NA)	(NA)
2499	WOOD PRODUCTS, NEC . . . . .	132	39	5.3	38.9	4.0	7.9	24.4	72.7	52.5	123.8	3.9	(NA)	(NA)

See footnotes at end of table.



TABLE 3. General Statistics for the State, by Industry Groups and Industries: 1972 and 1967—Continued

(See appendix, Explanation of Terms)

Code	Industry	1972											1967	
		Establishments		All employees		Production workers			Value added by manufacture	Cost of materials <sup>1</sup>	Value of shipments <sup>1</sup>	Capital expenditures, new	All employees	Value added by manufacture
		Total	With 20 employees or more	Number	Payroll	Number	Man-hours	Wages						
		(number)	(number)	(1,000)	(million dollars)	(1,000)	(million)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(1,000)	(million dollars)
25	FURNITURE AND FIXTURES . . . . .	465	201	24.5	199.4	19.0	37.5	130.2	371.8	367.9	736.4	16.6	25.8	280.9
251	HOUSEHOLD FURNITURE . . . . .	220	108	12.0	87.8	9.9	19.2	60.8	167.5	169.0	334.1	7.6	(NA)	(NA)
2511	WOOD HOUSEHOLD FURNITURE . . . . .	83	33	2.9	19.6	2.5	4.8	14.6	34.6	34.8	68.7	.5	(NA)	(NA)
2512	UPHOLSTERED HOUSEHOLD FURNITURE . . . . .	35	19	2.9	20.8	2.4	4.4	14.3	39.0	33.1	71.5	.9	(NA)	(NA)
2514	METAL HOUSEHOLD FURNITURE . . . . .	43	22	3.6	27.3	2.9	5.6	18.4	54.5	56.4	110.5	3.6	4.0	42.5
2515	MATTRESSES AND BEDSPRINGS . . . . .	38	17	1.0	8.8	.7	1.5	5.0	18.5	21.8	40.3	.5	EE	(D)
254	PARTITIONS AND FIXTURES . . . . .	144	52	6.5	56.2	4.6	8.9	34.7	103.5	89.3	189.9	4.1	5.8	74.9
2541	WOOD PARTITIONS AND FIXTURES . . . . .	101	24	2.6	22.8	1.9	3.5	14.3	38.2	35.9	71.4	1.5	2.2	26.3
2542	METAL PARTITIONS AND FIXTURES . . . . .	43	28	3.9	33.4	2.7	5.4	20.4	65.3	53.4	118.5	2.6	3.6	48.6
259	MISC. FURNITURE AND FIXTURES . . . . .	54	17	2.9	26.5	2.2	4.5	16.1	48.5	44.5	95.8	3.7	2.9	33.5
26	PAPER AND ALLIED PRODUCTS . . . . .	465	310	39.9	355.4	30.7	63.6	243.5	717.1	742.6	1 451.4	38.5	40.9	528.8
2631	PAPERBOARD MILLS . . . . .	11	9	1.7	17.8	1.4	3.1	14.3	32.8	37.7	70.8	3.1	2.2	35.3
264	MISC. CONVERTED PAPER PRODUCTS . . . . .	203	114	16.6	143.6	12.5	25.5	93.7	325.5	265.3	584.6	14.5	16.2	238.4
2642	ENVELOPES . . . . .	24	17	3.2	28.8	2.6	5.5	20.2	45.0	34.3	79.1	2.3	3.2	35.3
2643	BAGS, EXCEPT TEXTILE BAGS . . . . .	53	25	4.5	35.1	3.4	6.6	22.8	89.6	74.9	163.1	4.5	3.5	47.1
2645	DIE-CUT PAPER AND BOARD . . . . .	39	19	1.8	15.7	1.4	2.9	10.5	30.6	30.8	61.1	1.8	2.2	25.2
2648	STATIONERY PRODUCTS . . . . .	18	9	1.1	8.9	.8	1.6	5.5	17.9	15.7	33.4	.5	(NA)	(NA)
2649	CONVERTED PAPER PRODUCTS, NEC. . . . .	25	18	1.5	13.3	1.1	2.2	9.0	25.8	24.5	50.4	.9	(NA)	(NA)
265	PAPERBOARD CONTAINERS AND BOXES . . . . .	237	176	20.3	180.3	15.8	32.7	124.6	328.9	408.3	734.8	18.3	20.8	230.2
2651	FOLDING PAPERBOARD BOXES . . . . .	51	37	4.3	41.0	3.5	7.1	29.7	69.0	84.5	151.4	2.8	5.0	58.2
2652	SETUP PAPERBOARD BOXES . . . . .	28	15	1.1	6.8	1.0	1.9	5.1	10.2	7.3	17.5	.4	1.4	9.9
2653	CORRUGATED AND SOLID FIBER BOXES . . . . .	121	95	9.9	94.5	7.2	15.1	61.0	161.4	235.2	396.8	8.7	10.2	109.5
2654	SANITARY FOOD CONTAINERS . . . . .	20	17	3.9	29.7	3.2	6.6	22.0	72.4	65.7	137.7	5.7	3.3	43.0
2655	FIBER CANS, DRUMS, SIMILAR PRODUCTS . . . . .	17	12	1.1	8.4	.9	2.1	6.7	15.9	15.5	31.4	.7	1.0	9.7
2661	BUILDING PAPER AND BOARD MILLS . . . . .	8	7	.7	6.8	.6	1.2	5.7	13.0	15.0	28.1	1.6	CC	(D)
27	PRINTING AND PUBLISHING . . . . .	2 994	778	104.8	1 079.5	65.7	124.7	633.3	2 218.7	1 157.7	3 373.0	92.3	107.0	1 600.9
2711	NEWSPAPERS . . . . .	407	124	22.2	213.2	11.5	19.4	109.0	417.1	133.0	550.1	11.8	21.6	271.8
2721	PERIODICALS . . . . .	241	65	6.8	71.3	1.3	2.6	11.7	198.2	121.2	319.5	4.2	7.0	151.4
273	BOOKS . . . . .	139	48	8.9	92.3	1.8	3.9	16.1	364.0	158.4	522.1	7.8	9.2	276.9
2731	BOOK PUBLISHING . . . . .	102	35	7.9	82.6	1.1	2.5	9.1	346.4	150.2	496.4	6.8	8.0	257.0
2732	BOOK PRINTING . . . . .	37	13	1.0	9.8	.8	1.4	7.0	17.6	8.2	25.7	1.1	1.2	19.9
2741	MISCELLANEOUS PUBLISHING . . . . .	134	24	5.4	59.1	2.2	3.9	18.5	117.9	90.0	209.6	1.9	5.3	98.8
275	COMMERCIAL PRINTING . . . . .	1 624	343	44.9	487.7	35.5	68.9	361.4	829.3	526.0	1 353.1	57.4	(NA)	(NA)
2751	COMMERCIAL PRINTING, LETTERPRESS . . . . .	901	120	21.7	227.1	17.4	34.1	174.0	361.4	226.0	606.4	19.7	(NA)	(NA)
2752	COMMERCIAL PRINTING, LITHOGRAPHIC . . . . .	665	209	22.1	249.2	17.2	33.5	179.8	430.3	293.2	722.3	37.3	(NA)	(NA)
2753	ENGRAVING AND PLATE PRINTING . . . . .	52	10	.7	7.5	.5	1.0	5.0	12.0	3.3	15.3	.3	(NA)	(NA)
2754	COMMERCIAL PRINTING, GRAVURE . . . . .	6	4	.4	3.8	.3	.4	2.6	5.7	3.4	9.1	.1	(NA)	(NA)
2761	MANIFOLD BUSINESS FORMS . . . . .	48	30	3.4	33.5	2.6	5.3	24.0	75.1	57.7	132.4	3.4	3.8	60.1
2771	GREETING CARD PUBLISHING . . . . .	17	6	.9	5.0	.7	1.1	3.5	15.5	4.0	19.3	.1	1.6	12.8
278	BLANKBOOKS AND BOOKBINDING . . . . .	144	66	7.0	52.8	6.0	11.6	40.0	96.2	46.8	141.1	3.5	8.2	75.1
2782	BLANKBOOKS AND LOOSELEAF BINDERS . . . . .	48	28	3.3	23.9	2.7	5.4	17.6	46.4	29.4	74.9	2.2	3.5	32.9
2789	BOOKBINDING AND RELATED WORK . . . . .	96	38	3.7	28.9	3.2	6.2	22.4	49.8	17.4	66.2	1.3	4.7	42.2
279	PRINTING TRADE SERVICES . . . . .	240	72	5.4	64.7	4.2	7.9	49.1	105.4	20.6	125.9	2.1	(NA)	(NA)
2791	TYPESETTING . . . . .	156	39	3.1	33.4	2.4	4.6	25.3	56.4	7.3	63.6	1.3	3.4	42.7
2793	PHOTOENGRAVING . . . . .	38	11	.7	8.4	.5	.9	5.9	13.6	2.5	16.1	.2	1.5	21.5
2794	ELECTROTYPE AND STEREOTYPING . . . . .	10	7	.6	7.5	.5	.9	5.9	10.6	3.1	13.7	(2)	.8	12.7
2795	LITHOGRAPHIC PLATEMAKING SERVICES . . . . .	36	15	1.0	15.5	.8	1.6	12.0	24.8	7.7	32.5	.7	(NA)	(NA)
28	CHEMICALS AND ALLIED PRODUCTS . . . . .	814	352	51.9	533.1	30.3	61.4	262.8	2 163.9	1 760.7	3 900.6	174.7	5.7	1 565.8
281	INDUSTRIAL INORGANIC CHEMICALS . . . . .	50	31	3.7	38.9	2.6	5.6	24.9	131.6	115.5	232.0	15.3	(NA)	(NA)
2813	INDUSTRIAL GASES . . . . .	20	6	.4	3.7	.2	.4	1.9	20.0	8.3	28.5	(0)	.5	35.0
282	PLASTICS MATERIALS AND SYNTHETICS . . . . .	26	18	3.3	37.8	2.3	4.9	24.9	181.8	175.2	356.6	45.6	(NA)	(NA)
283	DRUGS . . . . .	78	33	12.1	128.6	5.2	10.3	42.8	429.2	134.3	560.2	14.0	10.5	283.8
2831	PHARMACEUTICALS . . . . .	7	5	.4	4.3	.2	.4	1.4	9.5	5.2	14.5	(0)	.2	1.3
2833	MEDICINALS AND BOTANICALS . . . . .	15	5	.3	3.2	.2	.3	1.8	7.1	7.1	14.1	(0)	.4	6.1
2834	PHARMACEUTICAL PREPARATIONS . . . . .	56	23	11.4	121.1	4.8	9.6	39.6	412.6	122.1	531.6	12.3	10.0	276.4
284	SOAPS, CLEANERS, AND TOILET GOODS . . . . .	214	79	12.3	112.0	8.2	16.0	62.4	823.1	573.9	1 397.3	43.1	(NA)	(NA)
2841	SOAP AND OTHER DETERGENTS . . . . .	48	23	3.0	33.8	1.7	3.6	18.8	175.0	172.0	357.9	5.9	2.8	148.8
2842	POLISHES AND SANITATION GOODS . . . . .	97	26	3.9	30.1	2.6	5.3	16.7	196.7	161.1	350.5	(0)	(NA)	(NA)
2843	SURFACE ACTIVE AGENTS . . . . .	13	#	.8	9.6	.5	1.1	5.3	33.2	44.8	76.9	(0)	.5	12.5
2844	TOILET PREPARATIONS . . . . .	56	21	4.6	38.4	3.3	6.0	21.7	418.3	195.9	612.1	9.2	5.3	231.7
2851	PAINTS AND ALLIED PRODUCTS . . . . .	143	70	7.8	77.4	4.7	9.4	38.7	219.8	282.3	497.5	13.3	9.2	190.1
286	INDUSTRIAL ORGANIC CHEMICALS . . . . .	33	15	3.4	42.5	2.2	4.2	23.7	123.9	143.0	270.9	11.9	(NA)	(NA)
2865	CYCLIC CRUDE AND INTERMEDIATES . . . . .	11	8	2.7	36.0	1.8	3.5	20.2	94.9	106.5	205.4	(0)	3.5	97.7
287	AGRICULTURAL CHEMICALS . . . . .	53	22	1.4	13.5	.8	1.7	6.0	37.7	84.9	121.5	1.7	(NA)	(NA)
2874	PHOSPHATIC FERTILIZERS . . . . .	8	8	.5	4.9	.3	.7	2.7	12.5	33.3	45.5	.7	(NA)	(NA)
2875	FERTILIZERS, MIXING ONLY . . . . .	26	6	.5	4.7	.2	.5	1.6	11.6	31.0	41.9	.4	.8	12.8
289	MISCELLANEOUS CHEMICAL PRODUCTS . . . . .	217	84	7.8	82.5	4.4	9.3	39.4	216.5	251.6	464.6	29.9	(NA)	(NA)
2892	EXPLOSIVES . . . . .	4	3	1.6	17.6	.6	1.2	5.6	16.2	14.8	30.8	(0)	5.2	63.2
2893	PRINTING INK . . . . .	43	22	1.8	19.4	1.1	2.5	10.1	43.6	55.2	98.1	2.2	2.2	41.4
2899	CHEMICAL PREPARATIONS, NEC . . . . .	120	32	2.7	26.1	1.7	3.4	14.2	111.3	116.1	226.3	(0)	(NA)	(NA)
29	PETROLEUM AND COAL PRODUCTS . . . . .	91	47	10.5	121.3	7.3	15.2	79.5	406.4	1 571.6	1 973.9	131.0	11.1	382.7

See footnotes at end of table.

TABLE 3. General Statistics for the State, by Industry Groups and Industries: 1972 and 1967—Continued

(See appendix, Explanation of Terms)

Code	Industry	1972											1967	
		Establishments		All employees		Production workers			Value added by manufacture	Cost of materials <sup>1</sup>	Value of shipments <sup>1</sup>	Capital expenditures, new	All employees	Value added by manufacture
		Total	With 20 employees or more	Number	Payroll	Number	Man-hours	Wages						
		(number)	(number)	(1,000)	(million dollars)	(1,000)	(million)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(1,000)	(million dollars)
2911	PETROLEUM REFINING . . . . .	13	12	6.4	79.0	4.6	9.1	52.6	277.6	1 387.8	1 666.2	125.3	6.5	295.2
295	PAVING AND ROOFING MATERIALS . . .	45	21	3.1	30.7	2.3	5.1	21.9	81.2	119.5	195.8	4.5	3.6	57.3
2951	PAVING MIXTURES AND BLOCKS . . . .	24	6	.5	4.7	.3	.6	2.7	11.3	17.0	28.2	1.1	.6	11.1
2952	ASPHALT FELTS AND COATINGS . . . .	21	15	2.6	26.0	2.0	4.5	19.2	70.0	102.5	167.6	3.4	3.0	46.2
299	MISC. PETROLEUM AND COAL PRODUCTS.	33	14	1.0	11.7	.5	1.0	4.9	47.5	64.3	111.9	1.1	(NA)	(NA)
2992	LUBRICATING OILS AND GREASES . . . .	30	11	.8	10.2	.4	.8	4.0	41.3	53.6	95.1	1.0	(NA)	(NA)
30	RUBBER AND MISC. PLASTICS PROD . .	647	321	40.1	337.9	31.5	63.8	230.7	719.4	544.6	1 256.6	78.5	(NA)	(NA)
3079	MISCELLANEOUS PLASTICS PRODUCTS. . .	562	268	27.8	217.6	22.2	44.3	145.8	441.8	347.5	783.9	47.7	(NA)	(NA)
314	FOOTWEAR, EXCEPT RUBBER. . . . .	24	21	6.6	45.1	5.9	11.1	33.9	81.6	56.7	137.2	1.7	FF	(D)
3161	LUGGAGE. . . . .	30	8	.8	4.7	.6	1.2	3.3	7.9	6.3	13.9	.2	1.4	7.6
32	STONE, CLAY, AND GLASS PRODUCTS.	788	251	35.5	336.5	28.9	58.3	253.4	711.4	531.7	1 233.3	65.8	37.9	553.3
3231	PRODUCTS OF PURCHASED GLASS, NEC . .	51	16	2.8	31.4	2.3	4.8	24.7	65.4	65.7	131.8	1.6	2.8	46.2
3241	CEMENT, HYDRAULIC. . . . .	4	3	.7	8.7	.6	1.3	7.6	22.3	12.1	33.8	13.9	.9	24.1
325	STRUCTURAL CLAY PRODUCTS . . . . .	26	17	1.2	9.7	1.0	1.9	7.5	17.5	11.9	28.7	.7	1.9	18.1
3251	BRICK AND STRUCTURAL CLAY TILE . . . .	13	10	.8	6.0	.7	1.3	4.8	8.7	4.4	13.3	.3	EE	(D)
3259	STRUCTURAL CLAY PRODUCTS, NEC. . . .	9	5	.3	3.0	.3	.5	2.3	6.4	3.7	9.3	(D)	.6	6.6
326	POTTERY AND RELATED PRODUCTS . . . .	26	12	2.8	19.1	2.4	4.8	16.2	33.4	11.9	45.1	1.0	EE	(D)
327	CONCRETE, GYPSUM, PLASTER PRODUCTS	473	112	7.8	80.1	5.6	11.5	53.0	166.8	179.4	342.1	23.0	6.7	119.4
3271	CONCRETE BLOCK AND BRICK . . . . .	57	12	.9	8.1	.6	1.1	4.9	17.4	15.9	32.6	3.5	CC	(D)
3272	CONCRETE PRODUCTS, NEC . . . . .	156	36	2.7	25.7	2.0	3.9	16.6	53.4	30.0	80.4	3.3	2.6	40.3
3273	READY-MIXED CONCRETE . . . . .	249	56	3.8	41.1	2.7	5.5	27.4	81.9	114.3	196.1	11.3	3.0	58.3
329	MISC. NONMETALLIC MINERAL PRODUCTS	149	67	8.7	81.1	6.7	13.7	56.0	182.9	141.1	322.8	8.9	(NA)	(NA)
3291	ABRASIVE PRODUCTS. . . . .	46	21	2.1	18.2	1.5	2.8	10.7	50.7	27.4	77.4	1.0	EE	(D)
3292	ASBESTOS PRODUCTS. . . . .	11	9	2.4	24.4	1.9	3.8	18.9	59.9	51.1	109.9	3.0	(NA)	(NA)
3295	MINERALS, GROUND OR TREATED. . . . .	19	8	.4	4.6	.3	.9	3.4	10.1	10.3	20.4	1.2	.6	9.7
3299	NONMETALLIC MINERAL PRODUCTS, NEC. .	23	7	.5	4.9	.4	1.0	3.9	7.1	7.9	18.7	.4	CC	(D)
33	PRIMARY METAL INDUSTRIES . . . . .	560	347	97.3	1 061.9	78.9	159.2	801.5	1 896.7	2 840.6	4 697.7	148.6	108.6	1 654.1
331	BLAST FURNACE, BASIC STEEL PROD. . . .	93	68	49.2	589.9	40.0	79.9	448.0	1 079.0	1 443.6	2 514.8	75.3	50.5	831.3
3315	STEEL WIRE AND RELATED PRODUCTS. . . .	32	23	3.8	40.1	3.0	6.0	26.5	67.4	60.6	127.2	3.1	4.8	57.3
3317	STEEL PIPE AND TUBES . . . . .	13	11	1.4	15.9	1.1	2.4	11.7	42.5	74.8	117.4	3.4	CC	(D)
332	IRON AND STEEL FOUNDRIES . . . . .	99	81	19.6	190.2	16.3	33.3	148.5	302.6	184.8	481.8	18.7	21.1	271.3
3321	GRAY IRON FOUNDRIES. . . . .	71	58	12.1	115.6	10.4	21.3	92.7	185.7	129.6	311.3	11.1	7.2	92.5
3322	MALLEABLE IRON FOUNDRIES . . . . .	7	6	2.1	22.9	1.6	3.5	17.1	32.7	14.1	46.0	(D)	5.5	67.9
3324	STEEL INVESTMENT FOUNDRIES . . . . .	4	3	.7	5.1	.5	1.0	3.9	8.2	2.1	10.2	(D)	(NA)	(NA)
3325	STEEL FOUNDRIES, NEC . . . . .	17	14	4.7	46.6	3.8	7.5	34.8	76.0	39.0	114.4	2.0	(NA)	(NA)
333	PRIMARY NONFERROUS METALS. . . . .	10	7	.7	6.5	.5	1.0	4.6	13.4	89.8	103.0	8.0	1.1	10.9
3341	SECONDARY NONFERROUS METALS. . . . .	36	25	2.4	24.2	1.7	3.6	14.9	50.1	238.4	287.3	2.9	2.7	40.1
335	NONFERROUS ROLLING AND DRAWING . . . .	53	46	16.0	166.6	12.4	25.3	121.7	297.2	769.0	1 042.0	36.8	15.4	265.0
3351	COPPER ROLLING AND DRAWING . . . . .	9	7	4.8	51.2	3.7	7.8	37.2	109.5	248.0	354.3	6.8	4.5	81.6
3354	ALUMINUM EXTRUDED PRODUCTS . . . . .	11	9	3.7	41.0	3.0	5.9	30.9	41.6	173.8	214.3	2.9	(NA)	(NA)
3357	NONFERROUS WIRE DRAWING, INSULATING.	25	23	5.8	57.6	4.5	9.0	41.2	128.3	235.8	352.5	9.1	FF	(D)
336	NONFERROUS FOUNDRIES . . . . .	185	84	7.0	61.2	6.0	11.8	47.0	108.8	92.4	200.8	5.3	9.0	107.8
3361	ALUMINUM FOUNDRIES . . . . .	95	45	3.7	30.7	3.1	6.2	23.1	58.1	40.1	97.5	3.0	4.2	49.2
3362	BRASS, BRONZE, AND COPPER FOUNDRIES.	48	19	1.1	10.4	1.0	1.9	8.2	18.5	18.8	36.9	.7	1.5	21.8
3369	NONFERROUS FOUNDRIES, NEC. . . . .	42	20	2.1	20.1	1.8	3.6	15.7	32.2	33.5	66.4	1.6	3.4	36.8
339	MISC. PRIMARY METAL PRODUCTS . . . . .	86	38	2.5	23.1	2.1	4.3	16.7	45.6	22.6	68.0	1.6	(NA)	(NA)
3398	METAL HEAT TREATING. . . . .	76	33	2.2	19.9	1.8	3.7	14.5	39.1	19.1	58.0	1.5	(NA)	(NA)
3399	PRIMARY METAL PRODUCTS, NEC. . . . .	10	5	.3	3.2	.3	.5	2.3	6.5	3.5	9.9	.1	(NA)	(NA)
34	FABRICATED METAL PRODUCTS. . . . .	2 510	1 095	149.9	1 442.2	116.8	238.4	1 017.1	2 844.0	2 509.6	5 329.4	(C)	(NA)	(NA)
341	METAL CANS AND SHIPPING CONTAINERS	46	40	11.4	124.7	9.6	20.2	99.1	242.6	304.2	545.5	13.6	(NA)	(NA)
3411	METAL CANS . . . . .	30	28	9.7	104.3	8.3	17.1	84.6	208.7	258.4	466.0	12.4	10.4	151.9
3412	METAL BARRELS, DRUMS, AND PAILS. . . .	16	12	1.7	20.4	1.4	3.1	14.4	33.9	45.8	79.5	1.2	2.3	26.9
342	CUTLERY, HANDTOOLS AND HARDWARE. . .	170	85	18.2	158.3	14.3	29.2	103.1	343.9	192.7	531.1	16.4	17.4	229.7
3423	HAND AND EDGE TOOLS, NEC . . . . .	54	24	3.6	36.2	2.8	5.8	25.2	92.1	44.6	133.9	3.5	3.3	56.1
3425	HANDSAWS AND SAWBLADES . . . . .	8	4	.3	3.3	.3	.5	2.0	10.5	3.9	14.2	(D)	.5	10.3
3429	HARDWARE, NEC. . . . .	101	56	14.2	118.5	11.2	22.7	75.6	240.2	143.7	381.4	12.6	13.6	162.7
343	PLUMBING, HEATING, EXC. ELECTRIC . . .	66	38	6.1	53.3	4.5	8.5	33.3	119.1	98.4	212.0	4.4	(NA)	(NA)
3431	METAL SANITARY WARE. . . . .	12	11	1.7	14.4	1.2	2.4	8.9	41.7	26.0	66.3	1.2	1.1	19.8
344	FABRICATED STRUCTURAL METAL PROD . .	556	228	21.2	197.5	15.7	30.6	129.9	426.5	427.9	859.2	19.0	21.2	305.4
3441	FABRICATED STRUCTURAL METAL PRODUCTS	130	55	5.2	49.7	3.9	7.9	33.3	111.2	100.5	207.2	4.8	5.5	81.6
3442	METAL DOORS, SASH, AND TRIM. . . . .	81	36	3.3	26.1	2.3	4.5	17.0	48.4	48.9	96.8	1.8	3.6	33.3
3443	FABRICATED PLATEWORK (BOILERS SHOP).	76	47	3.7	38.0	2.8	5.6	26.1	77.6	55.8	132.7	1.5	4.2	73.8
3444	SHEET METALWORK. . . . .	164	55	4.3	40.3	3.3	6.2	26.6	77.1	71.4	147.4	2.8	3.8	46.1
3446	ARCHITECTURAL METALWORK. . . . .	70	13	1.2	12.0	.8	1.5	6.1	20.2	19.3	38.8	3.6	1.0	14.4

See footnotes at end of table.



TABLE 3. General Statistics for the State, by Industry Groups and Industries: 1972 and 1967—Continued  
(See appendix, Explanation of Terms)

Code	Industry	1972											1967	
		Establishments		All employees		Production workers			Value added by manufacture	Cost of materials <sup>1</sup>	Value of shipments <sup>1</sup>	Capital expenditures, new	All employees	Value added by manufacture
		Total	With 20 employees or more	Number	Payroll	Number	Man-hours	Wages						
		(number)	(number)	(1,000)	(million dollars)	(1,000)	(million)	(million dollars)					(1,000)	(million dollars)
345	SCREW MACHINE PRODUCTS, BOLTS, ETC.	358	150	19.7	197.3	15.6	33.9	144.9	373.4	256.7	620.7	19.5	20.0	290.6
3451	SCREW MACHINE PRODUCTS . . . . .	250	84	7.5	71.3	6.2	13.2	53.1	127.4	91.7	217.0	5.1	7.2	98.7
3452	BOLTS, NUTS, RIVETS, AND WASHERS . .	108	66	12.2	126.0	9.4	20.6	91.8	246.0	165.0	403.7	14.4	12.7	191.9
346	METAL FORGINGS AND STAMPINGS . . .	389	199	30.6	332.5	25.0	51.2	253.9	620.8	609.9	1 231.8	(C)	(NA)	(NA)
3465	AUTOMOTIVE STAMPINGS . . . . .	23	16	9.4	123.1	7.8	16.7	98.3	208.2	239.8	453.5	(C)	(NA)	(NA)
3466	CROWNS AND CLOSURES . . . . .	10	9	2.3	20.9	2.0	3.6	16.1	46.0	41.9	85.7	1.7	(NA)	(NA)
3469	METAL STAMPINGS, NEC . . . . .	312	146	13.5	124.8	10.9	22.1	90.5	250.7	211.6	462.3	10.8	(NA)	(NA)
347	METAL SERVICES, NEC . . . . .	440	138	9.3	78.8	7.4	15.1	53.7	138.7	92.2	229.7	8.2	10.4	118.1
3471	PLATING AND POLISHING . . . . .	299	91	5.8	44.5	4.7	9.5	30.4	81.3	30.9	111.9	4.8	6.4	69.6
3479	METAL COATING AND ALLIED SERVICES .	141	47	3.6	34.2	2.7	5.7	23.3	57.4	61.3	117.8	3.4	3.9	48.5
348	ORDNANCE AND ACCESSORIES, NEC . .	12	7	5.2	40.7	3.5	7.0	27.3	72.6	57.2	132.8	4.5	(NA)	(NA)
349	MISC. FABRICATED METAL PRODUCTS .	473	210	28.2	259.2	21.0	42.7	172.1	506.3	470.4	966.5	20.2	(NA)	(NA)
3493	STEEL SPRINGS, EXCEPT WIRE . . .	13	5	1.0	11.0	.7	1.6	6.4	22.3	54.8	77.0	.5	88	(D)
3494	VALVES AND PIPE FITTINGS . . . . .	57	40	9.9	99.8	6.6	12.9	60.1	165.3	141.6	304.3	7.3	11.7	162.0
3495	WIRE SPRINGS . . . . .	37	27	3.4	30.4	2.8	5.9	23.7	47.0	37.6	83.3	2.0	(NA)	(NA)
3496	MISC. FABRICATED WIRE PRODUCTS .	110	43	3.7	29.4	3.0	5.8	19.9	54.3	38.7	91.9	3.3	(NA)	(NA)
3497	METAL FOIL AND LEAF . . . . .	6	5	.7	6.1	.5	1.1	4.3	12.6	18.9	31.0	.2	.6	11.2
3498	FABRICATED PIPE AND FITTINGS . . .	25	13	1.2	9.8	1.0	2.4	7.7	29.8	28.2	56.9	.9	1.1	12.5
3499	FABRICATED METAL PRODUCTS, NEC . .	225	77	8.4	72.6	6.5	13.0	50.0	175.0	150.6	322.2	6.0	(NA)	(NA)
35	MACHINERY, EXCEPT ELECTRICAL . .	3 159	903	199.6	2 140.0	142.9	285.9	1 390.8	4 252.9	3 541.7	7 666.6	199.9	223.8	3 415.9
351	ENGINES AND TURBINES . . . . .	19	14	12.2	141.1	9.0	17.4	91.8	239.5	310.2	538.8	11.0	10.6	143.8
352	FARM AND GARDEN MACHINERY . . . .	111	60	21.3	233.8	16.6	31.2	169.0	475.9	559.9	975.5	11.6	(NA)	(NA)
3523	FARM MACHINERY AND EQUIPMENT . . .	102	51	20.2	222.5	15.8	29.5	161.3	454.4	524.6	912.0	10.8	(NA)	(NA)
3524	LAWN AND GARDEN EQUIPMENT . . . .	9	9	1.1	11.3	.3	1.7	7.8	21.5	35.2	61.5	.8	(NA)	(NA)
353	CONSTRUCTION AND RELATED MACHINERY	170	92	56.2	647.9	41.3	81.0	441.8	1 389.8	1 262.3	2 630.9	80.8	63.1	1 022.9
3532	MINING MACHINERY . . . . .	12	7	.9	8.4	.6	1.2	4.8	11.9	13.6	24.5	.5	EE	(D)
3534	ELEVATORS AND MOVING STAIRWAYS . .	16	10	1.3	12.2	.9	1.9	8.0	21.6	19.0	42.9	.4	CC	(D)
3535	CONVEYORS AND CONVEYING EQUIPMENT .	48	20	2.8	29.8	1.6	3.2	14.4	59.6	44.9	102.7	1.1	3.0	51.0
354	METALWORKING MACHINERY . . . . .	1 011	224	32.0	344.8	22.4	47.0	217.6	600.5	320.6	921.1	(C)	38.9	555.9
3541	MACHINE TOOLS, METAL CUTTING TYPES .	111	37	6.4	71.4	3.7	8.0	36.0	113.9	69.8	177.9	5.6	9.1	134.4
3542	MACHINE TOOLS, METAL FORMING TYPES .	53	30	6.6	76.3	4.6	10.0	49.0	108.9	88.1	199.6	3.5	7.4	106.2
3544	SPECIAL DIES, TOOLS, JIGS, FIXTURES .	708	106	8.5	101.2	6.9	15.1	76.8	165.7	59.2	223.0	(C)	10.6	158.0
3545	MACHINE TOOL ACCESSORIES . . . . .	87	25	4.6	47.6	3.1	6.0	27.6	82.6	29.6	111.4	2.9	6.4	85.4
3549	METALWORKING MACHINERY, NEC . . . .	35	12	1.4	13.1	.9	1.9	8.5	87.5	17.0	103.4	.9	(NA)	(NA)
355	SPECIAL INDUSTRY MACHINERY . . . . .	288	115	14.5	156.4	9.3	18.8	89.5	287.1	211.4	489.0	9.1	17.0	236.9
3551	FOOD PRODUCTS MACHINERY . . . . .	72	39	3.9	41.6	2.4	4.7	21.8	74.7	54.9	128.2	2.4	5.1	66.9
3553	WOODWORKING MACHINERY . . . . .	15	6	.9	8.8	.7	1.3	6.3	18.8	15.2	33.0	.3	1.1	13.6
3555	PRINTING TRADES MACHINERY . . . . .	81	28	5.3	61.6	3.4	7.0	35.2	110.5	84.5	189.8	2.9	6.1	76.9
3559	SPECIAL INDUSTRY MACHINERY, NEC . .	107	38	3.6	37.5	2.3	4.8	22.0	72.4	51.6	122.2	2.7	3.7	66.6
356	GENERAL INDUSTRIAL MACHINERY . . .	346	142	23.9	237.5	16.7	33.9	148.1	493.9	301.7	787.2	20.3	26.8	412.6
3564	BLOWERS AND FANS . . . . .	29	10	1.5	14.1	1.1	2.4	8.6	27.0	20.4	46.8	.8	1.6	25.1
3565	INDUSTRIAL PATTERNS . . . . .	96	14	1.0	12.7	.8	1.5	10.3	19.0	4.1	23.1	.5	1.1	15.6
3567	INDUSTRIAL FURNACES AND OVENS . . .	13	7	.8	9.7	.5	1.1	4.1	19.5	11.0	30.7	.3	2.3	30.1
3569	GENERAL INDUSTRIAL MACHINERY, NEC .	82	31	3.0	31.0	2.1	4.3	18.9	44.0	33.2	80.3	(D)	3.7	55.7
357	OFFICE AND COMPUTING MACHINES . . .	55	30	9.0	87.8	5.1	10.3	39.7	185.9	144.8	335.4	8.9	8.9	149.9
358	REFRIGERATION, SERVICE MACHINERY .	157	87	17.0	164.8	12.4	25.7	105.9	345.2	306.0	632.2	18.8	11.9	175.5
3581	AUTOMATIC MERCHANDISING MACHINES .	18	9	2.7	23.9	2.3	5.5	20.0	45.5	28.2	69.6	(D)	1.5	16.0
3589	SERVICE INDUSTRY MACHINERY, NEC . .	76	35	4.6	46.9	2.6	5.1	22.1	102.3	82.0	182.4	2.3	4.5	71.0
359	MISC. MACHINERY, EXCEPT ELECTRICAL	1 002	139	13.6	125.8	10.2	20.7	87.4	235.2	124.8	358.5	11.4	(NA)	(NA)
36	ELECTRIC, ELECTRONIC EQUIPMENT . .	954	515	171.2	1 432.7	123.7	234.0	891.6	3 032.0	2 966.3	5 904.0	145.7	(NA)	(NA)
361	ELECTRIC DISTRIBUTING EQUIPMENT . .	81	53	12.1	104.1	9.2	18.5	66.5	169.6	149.5	315.9	5.1	(NA)	(NA)
3612	TRANSFORMERS . . . . .	21	16	5.2	41.6	4.2	8.6	29.3	61.3	70.9	131.6	1.5	6.4	58.1
3613	SWITCHGEAR AND SWITCHBOARD APPARATUS	60	37	6.9	62.5	5.0	9.9	37.2	108.3	78.7	184.3	3.6	7.7	96.6
362	ELECTRICAL INDUSTRIAL APPARATUS . .	131	72	11.3	88.8	8.3	15.7	52.4	184.4	136.2	315.4	7.4	11.9	145.1
3621	MOTORS AND GENERATORS . . . . .	34	20	3.6	26.5	2.9	5.7	18.0	51.9	40.9	92.2	1.7	4.0	42.3
3622	INDUSTRIAL CONTROLS . . . . .	51	26	5.0	39.8	3.5	6.4	21.1	91.2	63.1	151.6	3.4	5.1	73.4
3623	WELDING APPARATUS, ELECTRIC . . . .	14	5	.9	9.7	.6	1.1	5.0	15.5	11.0	25.6	1.8	.9	12.9
363	HOUSEHOLD APPLIANCES . . . . .	59	36	23.1	210.1	18.4	36.5	151.2	411.3	468.6	851.8	17.4	25.6	313.9
3631	HOUSEHOLD COOKING EQUIPMENT . . . .	11	10	4.8	44.6	3.8	7.6	32.1	74.7	106.6	183.3	1.8	5.6	59.3
3634	ELECTRIC HOUSEWARES AND FANS . . . .	30	14	5.3	46.1	3.8	7.0	25.2	72.5	55.7	128.3	1.1	7.0	75.4
364	ELECT. LIGHTING AND WIRING EQUIP . .	184	96	19.5	161.5	14.7	28.8	100.6	335.2	248.4	574.1	20.6	17.9	242.0
3643	CURRENT-CARRYING WIRING DEVICES . .	32	19	6.5	53.6	4.5	8.8	29.8	113.6	56.2	165.8	6.3	5.4	77.2
3644	NONCURRENT-CARRYING WIRING DEVICES .	18	13	4.3	38.3	3.3	6.4	26.7	73.8	64.9	134.9	4.1	4.1	65.7
3645	RESIDENTIAL LIGHTING FIXTURES . . . .	73	36	3.5	29.4	2.9	5.6	17.8	51.1	54.0	104.4	2.1	(NA)	(NA)
3646	COMMERCIAL LIGHTING FIXTURES . . . .	24	10	1.4	11.3	1.0	2.0	6.0	27.6	25.8	52.9	.9	(NA)	(NA)
365	RADIO AND TV RECEIVING EQUIPMENT .	70	39	24.3	181.6	19.2	35.4	120.6	549.1	988.0	1 517.6	18.8	38.8	388.8
3651	RADIO AND TV RECEIVING SETS . . . .	48	30	22.5	168.3	17.9	32.8	112.4	507.0	976.0	1 456.3	17.6	38.1	383.3
3652	PHONOGRAPH RECORDS . . . . .	22	9	1.8	13.3	1.3	2.6	8.2	42.1	12.0	61.3	1.2	.8	5.5

See footnotes at end of table.

TABLE 3. General Statistics for the State, by Industry Groups and Industries: 1972 and 1967—Continued

(See appendix, Explanation of Terms)

Code	Industry	1972										1967		
		Establishments		All employees		Production workers			Value added by manufacture	Cost of materials <sup>1</sup>	Value of shipments <sup>1</sup>	Capital expenditures, new	All employees	Value added by manufacture
		Total	With 20 employees or more	Number	Payroll	Number	Man-hours	Wages						
		(number)	(number)	(1,000)	(million dollars)	(1,000)	(million)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(1,000)	(million dollars)
366	COMMUNICATION EQUIPMENT. . . . .	105	53	47.9	442.7	28.6	50.6	240.5	918.1	557.8	1 457.9	43.9	FF	(D)
367	ELECTRONIC COMPONENTS AND ACCESS. .	213	126	25.5	187.0	19.5	37.3	122.4	338.9	292.7	623.7	27.8	35.8	357.2
369	MISC. ELECTRICAL EQUIP., SUPPLIES. .	111	40	7.4	57.0	5.7	11.0	37.4	125.5	124.9	247.6	4.8	7.7	101.4
3691	STORAGE BATTERIES. . . . .	11	5	1.1	10.0	.8	1.6	7.2	26.1	33.2	58.4	.8	1.4	24.3
3694	ENGINE ELECTRICAL EQUIPMENT. . . . .	25	11	2.8	22.0	2.3	4.5	15.4	44.8	39.8	82.9	1.8	3.1	37.3
37	TRANSPORTATION EQUIPMENT. . . . .	277	139	48.0	487.1	38.1	76.0	356.0	1 244.4	1 797.5	2 998.6	(D)	(NA)	(NA)
371	MOTOR VEHICLES AND EQUIPMENT. . . .	166	91	26.5	248.4	22.1	44.9	194.5	650.0	1 295.4	1 938.2	(D)	22.4	425.6
3713	TRUCK AND BUS BODIES. . . . .	28	18	2.0	17.1	1.5	3.0	12.1	31.1	32.0	62.3	1.6	1.6	16.6
3724	AIRCRAFT ENGINES AND ENGINE PARTS. .	5	4	1.4	15.7	.9	1.8	9.5	24.6	8.6	31.6	.7	(NA)	(NA)
373	SHIP, BOAT BUILDING, REPAIRING. . . .	28	12	.9	6.8	.8	1.4	5.3	12.1	12.2	22.5	.5	CC	(D)
3731	SHIP BUILDING AND REPAIRING. . . . .	6	4	.3	3.5	.3	.5	2.9	4.5	2.7	7.2	.2	.2	2.5
3732	BOAT BUILDING AND REPAIRING. . . . .	22	8	.6	3.4	.5	.9	2.4	7.6	9.5	15.4	.3	CC	(D)
3743	RAILROAD EQUIPMENT. . . . .	34	18	13.1	156.2	10.2	20.0	112.5	443.1	382.8	804.4	10.1	(NA)	(NA)
379	MISC. TRANSPORTATION EQUIPMENT. . .	24	4	.4	3.0	.3	.7	2.3	3.6	7.6	10.8	.1	(NA)	(NA)
38	INSTRUMENTS AND RELATED PRODUCTS	417	160	44.0	400.3	27.8	53.7	208.8	849.9	524.7	1 374.6	36.2	(NA)	(NA)
3811	ENGINEERING, SCIENTIFIC INSTRUMENTS.	57	23	4.2	39.3	2.1	4.1	15.2	65.1	50.0	126.6	2.3	4.0	58.4
382	MEASURING AND CONTROLLING DEVICES.	87	37	17.9	157.4	11.7	22.4	85.6	319.9	147.3	465.4	13.6	(NA)	(NA)
3822	ENVIRONMENTAL CONTROLS. . . . .	9	5	6.2	51.5	4.1	7.6	29.4	112.1	44.6	156.7	4.7	6.9	110.2
3823	PROCESS CONTROL INSTRUMENTS. . . . .	13	9	4.2	34.4	3.0	6.2	22.6	66.7	28.1	90.4	4.6	(NA)	(NA)
3825	INSTRUMENTS TO MEASURE ELECTRICITY. .	39	17	4.8	42.8	3.0	5.9	21.4	99.6	44.7	142.2	2.7	(NA)	(NA)
3832	OPTICAL INSTRUMENTS AND LENSES. . . .	27	8	.7	6.1	.4	.7	2.8	12.5	7.6	20.2	.3	(NA)	(NA)
384	MEDICAL INSTRUMENTS AND SUPPLIES. .	121	45	8.3	78.1	5.0	10.0	40.7	218.1	113.4	322.0	8.6	7.0	132.1
3841	SURGICAL AND MEDICAL INSTRUMENTS. .	31	16	1.9	14.7	1.1	2.3	9.1	21.3	13.1	33.7	2.2	1.1	12.8
3842	SURGICAL APPLIANCES AND SUPPLIES. . .	52	18	5.2	51.6	3.1	6.2	26.0	170.3	83.8	245.1	5.8	4.9	103.1
3843	DENTAL EQUIPMENT AND SUPPLIES. . . .	38	11	1.2	11.8	.8	1.6	5.6	26.5	16.4	43.1	.5	1.1	16.2
3851	OPHTHALMIC GOODS. . . . .	33	8	.9	7.2	.6	1.2	3.6	12.8	8.5	21.3	.9	.9	8.4
3861	PHOTOGRAPHIC EQUIPMENT AND SUPPLIES.	74	31	8.5	80.3	5.4	10.1	41.9	171.6	129.2	302.4	8.5	10.7	153.8
3873	WATCHES, CLOCKS, AND WATCHCASES. . .	18	8	3.5	31.9	2.7	5.2	19.0	50.0	68.6	116.8	2.0	(NA)	(NA)
39	MISC. MANUFACTURING INDUSTRIES. . . .	802	281	36.5	277.6	28.6	55.1	185.5	560.0	479.1	1 016.2	27.0	37.2	394.9
391	JEWELRY, SILVERWARE & PLATED WARE. .	52	12	1.4	11.2	1.0	1.7	7.5	24.8	23.3	46.3	.5	1.5	15.8
3911	JEWELRY, PRECIOUS METAL. . . . .	34	6	.6	4.9	.5	.8	3.3	9.9	9.2	18.4	.2	.8	8.7
3914	SILVERWARE AND PLATED WARE. . . . .	11	5	.6	5.5	.4	.7	3.6	13.8	12.8	25.5	.3	.7	6.9
3931	MUSICAL INSTRUMENTS. . . . .	36	17	5.5	40.1	4.0	7.8	27.9	77.6	87.2	161.1	2.9	6.2	62.5
394	TOYS AND SPORTING GOODS. . . . .	183	76	10.8	76.8	9.1	17.9	56.1	166.5	153.1	311.4	11.9	9.0	93.7
3944	GAMES, TOYS, AND CHILDREN'S VEHICLES	69	43	6.6	47.2	5.7	11.3	34.5	99.6	94.0	190.3	9.8	(NA)	(NA)
3949	SPORTING AND ATHLETIC GOODS, NEC. . .	99	30	3.8	28.0	3.1	6.1	20.5	64.0	57.2	116.7	2.1	3.4	33.5
395	PENS, PENCILS, OFFICE, ART GOODS. . .	76	29	2.8	24.9	1.8	3.7	12.6	52.5	37.4	87.2	2.0	3.0	39.7
396	COSTUME JEWELRY AND NOTIONS. . . . .	39	15	1.5	10.5	1.1	2.1	5.6	22.9	21.3	43.4	2.2	1.5	13.2
3961	COSTUME JEWELRY. . . . .	15	8	.3	1.6	.2	.5	1.1	3.1	3.3	6.2	.1	.2	2.1
3964	NEEDLES, PINS, AND FASTENERS. . . . .	12	8	.9	6.6	.6	1.2	3.2	13.9	11.9	25.9	(D)	.9	8.3
399	MISCELLANEOUS MANUFACTURES. . . . .	416	132	14.6	114.0	11.7	21.9	75.8	215.7	156.8	366.9	7.4	16.0	169.9
3991	BROOMS AND BRUSHES. . . . .	28	14	1.4	8.7	1.2	2.3	6.7	19.3	15.3	34.1	.8	1.5	15.4
3993	SIGNS AND ADVERTISING DISPLAYS. . . .	194	66	5.3	48.3	3.9	7.5	29.4	82.2	52.5	133.6	2.6	5.8	69.5
3995	RURAL CASKETS. . . . .	12	10	1.0	8.4	.8	1.5	5.7	14.9	12.9	27.5	.6	(NA)	(NA)
3999	MANUFACTURING INDUSTRIES, NEC. . . .	182	42	6.9	48.6	5.8	10.6	34.0	99.3	76.1	171.7	3.4	7.4	71.7
--	ADMINISTRATIVE AND AUXILIARY. . . . .	718	423	89.3	1 209.7	-	-	-	-	-	-	-	65.8	-

Note: The following symbols indicate employment size range for 1967:

AA less than 250 employees      EE 1,000 to 2,499 employees  
BB 250 to 499 employees      FF 2,500 employees and over  
CC 500 to 999 employees

- Represents zero. (NA) Not available. Because of a revision to this industry or industry group in the 1972 edition of the SIC manual, 1967 census data are not available on a comparable basis. (D) Withheld to avoid disclosing figures for individual companies.

<sup>1</sup>The total cost of materials and value of shipments for industry groups shown may include extensive duplication arising from shipments between establishments in the same industry classification. (For a more complete explanation, see appendix.)

<sup>2</sup>Includes figures for industry groups which have been withheld from publication in order to (a) avoid disclosing figures for individual companies or (b) permit further checking of figures for smaller industry groups. Additional detail will appear in the final report for this State.



## Appendix A. SCOPE AND COVERAGE

This report is one of a series presenting preliminary information, by State, from the 1972 Census of Manufactures. The data will be superseded in a final report which, in turn, will be included in *Volume III, Area Statistics, 1972 Census of Manufactures*. The final report will include a comprehensive discussion of the concepts and definitions used in the census.

The census of manufactures covers each manufacturing establishment in the United States with one paid employee or more; manufacturing establishments with no employees are excluded. Firms which operated more than one establishment were required to file a separate report for each location. Companies which engaged in distinctly different lines of activity at one location were asked to submit separate reports if the company records permitted such a separation and the activities were of significant size.

This report includes figures for administrative offices, warehouses, garages, or other auxiliary units which service manufacturing establishments.

In the 1972 census, the approximately 120,000 manufacturing establishments with fewer than 10 employees were excused from filing reports. Under special arrangements which safeguarded the confidentiality of both tax and census records, data on payrolls, sales, and industry classification from the administrative records of the Social Security Administration and the Internal Revenue Service were made available to the Census Bureau for use in the 1972 Economic Censuses (retail and wholesale trade, service industries, construction industries, manufactures, and mineral industries). Estimates for data other than payrolls and sales for these small establishments were constructed from industry averages. The effect on industry aggregates is slight in most industries. For manufacturing as a whole, these small establishments account for less than 3 percent of the payrolls and value added.

Establishments are classified by industry in accordance with industry definitions described in the 1972 edition of the Standard Industrial Classification (SIC) Manual. For 1972, the SIC was significantly revised and the comparability with prior year's data for some industries was significantly affected. The comparability at the 2- and 3-digit SIC levels was less affected. The final volumes of the 1972 Census of Manufactures will contain a table relating aggregates based on the 1972 SIC with aggregates derived from classifying establishments according to the 1967 SIC definitions.

As in earlier censuses, a number of small establishments may have been misclassified as to industry. However, such possible misclassifications have significant effect on *none* of the statistics except the number of establishments. As indicated above, report forms were not mailed to very small establishments (fewer than 10 employees). The industry classifications for these establishments were assigned on the basis of brief descriptions of the general activity of the establishment. Where the description is incomplete or there are relatively fine lines of demarcation among industries or between manufacturing and nonmanufacturing activity, the code assigned to an establishment could differ from that which would have been assigned on the basis of more complete product information. Therefore, the total establishment count for individual industries should be viewed as an approximation rather than a precise measurement. The counts for establishments with 20 employees or more are more reliable than the total number of establishments.

More detailed figures for this State will appear in the final census reports. Final reports will also include a comprehensive discussion of such concepts as "industry" and "establishment," as well as the various statistical items such as "employment," "value of shipments," and "value added." Similar preliminary and final reports will be issued for other States during the coming months. A series of preliminary summary reports showing U.S. totals for each manufacturing industry and for each State are being issued. Final industry reports and final area reports will be published during 1974.

Order forms describing the individual reports and listing their prices may be obtained from any U.S. Department of Commerce district office or from the Publications Distribution Section, Social and Economic Statistics Administration, Washington, D.C. 20233.

The 1972 Census of Manufactures is the 29th census of manufacturing establishments in the United States. For 1972, it was conducted jointly with the censuses of mineral industries, construction industries, retail trade, wholesale trade, and selected services under authority of Title 13 of the United States Code. Title 13 specifies that a census of manufactures be conducted every 5 years and, as amended, to cover years ending in "2" and "7". Title 13 also authorizes an annual sample survey of manufacturing establishments in interim years.



## Appendix B. EXPLANATION OF TERMS

*(For a more complete discussion of these terms and the method of compiling the Census of Manufactures, see the "Introduction" to the 1967 Census of Manufactures, Volume III).*

**All Employees**—All full-time and part-time employees on the payrolls of operating manufacturing establishments for any part of the pay period ending nearest the 12th of the months specified on the report form. Included are all persons on paid sick leave, paid holidays, and paid vacations during these pay periods. Officers of corporations are included as employees; proprietors and partners of unincorporated firms are excluded. The "all employee" number is the average number of production workers for the midmonth payroll period of March, May, August, and November plus the number of nonproduction employees in mid-March.

**Number of Production Workers**—Workers (up through the working foreman level) engaged in fabricating, processing, assembling, inspecting, receiving, packing, warehousing, shipping (but not delivering), and maintenance, repair, janitorial, and watchman services, product development, auxiliary production for plant's own use (e.g., powerplant), recordkeeping, and other closely associated services. Proprietors and partners are excluded.

**Payroll**—This item includes all forms of compensation such as salaries, wages, commissions, dismissal pay, bonuses, vacation and sick leave pay, and compensation in kind, prior to such deductions as employees' Social Security contributions, withholding taxes, group insurance, union dues, and savings bonds. The total includes salaries of officers of these establishments, if a corporation; it excludes payments to the proprietor or partners, if an unincorporated concern. Respondents were told that in reporting they could follow the definition of payrolls used for calculating the Federal withholding tax.

**Man-Hours of Production Workers**—This total relates to production-worker man-hours worked or paid for at the plant including actual overtime hours (not straight-time equivalent hours). It excludes hours paid for vacation, holidays, or sick leave when the employee was not at the plant.

**Cost of Materials**—The term "Cost of Materials" refers to charges actually paid or payable for items consumed or put into production during the year, including freight and other direct charges incurred by the establishment in acquiring these materials. It includes the cost of materials or fuel consumed regardless of

whether these items were purchased by the establishment from other companies, transferred to it from other establishments of the same company, or withdrawn from inventory during the year. The establishment was requested to value materials transferred from other parts of the company at its approximate market value, not at cost of production. The important components of this cost item are (a) all raw materials, semifinished goods, parts, components, containers, scrap, and supplies put into production or used as operating supplies and for repair and maintenance during the year; (b) electric energy purchased; (c) fuels consumed for heat, power, or the generation of electricity; (d) work done by others on materials or parts furnished by manufacturing establishments (contract work); and (e) products bought and resold in the same condition.

**Value of Shipments**—The value of shipments is the received or receivable net selling value, f.o.b. plant (exclusive of freight and taxes), of all products shipped, both primary and secondary, as well as all miscellaneous receipts such as receipts for contract work performed for others, installation and repair, sales of scrap, and sale of products bought and resold without further processing. Included are all items made by the establishment or for it under contract from materials owned by it whether sold, transferred to other plants of the same company, or shipped on consignment. The net selling value of products made in one plant on a contract basis from materials owned by another was reported by the plant providing the materials.

In the case of multiunit companies, the manufacturer was requested to report the value of products transferred to other establishments of the same company at full economic value; i.e., to include not only the direct costs of production but also a reasonable proportion of "all other costs" (including company overhead) and profit.

**Duplication in Cost of Materials and Value of Products**—The aggregate cost of materials and value-of-shipments figures for industry groups and for all manufacturing industries may include large amounts of duplication since the products of some industries are used as materials by others. With some important exceptions, such as motor vehicles and parts, this duplication is not significant within individual industries but arises from the addition of the totals of related industries in successive stages of the production of a finished manufactured product. Examples are the addition of flour mills to bakeries in the food group and the addition of pulp mills to paper mills in the paper and allied products group of industries. Esti-



mates of this duplication indicate that the value of manufactured products exclusive of such duplication—the value of finished manufactures—approximates two-thirds of the total value of products.

Prior to 1962, the Bureau of the Census did not publish figures for cost of materials or value of shipments if they contained significant duplication. Effective with the 1962 annual survey these figures were shown at all industry levels for the United States to meet the requests for their use in studies in which the presence of an indeterminate amount of duplication is not a limiting factor. However, they are appropriately footnoted. Effective with the 1964 annual survey, these industry group totals are also shown at the State, standard metropolitan statistical area, and large-county level.

Even where there is no significant amount of duplication, value-of-shipments figures are deficient as measures of the relative economic importance of individual manufacturing industries or geographic areas because of the wide variation in ratio of materials, labor, and other processing costs to value of shipments among industries.

**Value Added by Manufacture**—This measure of manufacturing activity is derived by subtracting the cost of materials, supplies, containers, fuel, purchased electricity, and cost of resales contract work from the value of shipments for products manufactured plus resales and receipts for services rendered. The result of this calculation is adjusted by the net change in finished goods and work-in-process inventories between the beginning and end of the year. (In the few industries that report value of production rather than value of shipments, only changes in work-in-process inventories are used to adjust value added. In the shipbuilding and repairing industry, no inventory adjustment is made.)

"Value added" avoids the duplication in the value of shipments figure which results from the use of products of some establishments as materials by others. Value added is considered to be the best value measure available for comparing the relative economic importance of manufacturing among industries and geographic areas.

**Expenditures for Plant and Equipment**—Manufacturing establishments in operation and establishments under construction but not yet in operation, were asked to report their expenditures for (a) permanent additions and major alterations to the manufacturing establishment, and (b) new machinery and equipment used for replacement purposes and additions to plant capacity if they are of the type for which depreciation accounts are ordinarily maintained.

These totals exclude expenditures for new facilities and equipment leased from nonmanufacturing concerns; new facilities owned by the Federal Government but operated under contract by private companies; and plant and equipment furnished to the manufacturer by communities and nonprofit organizations. Expenditures for used plant and equipment (although reported in the census), expenditures for land, and cost of maintenance and repairs charged as current operating expense are also omitted from the figures for new capital expenditures.

**Central Administrative Offices and Auxiliary Units**—In the 1972 census as in previous years, respondents were asked to file separate reports for central administrative offices or auxiliary units which were (1) at different locations from the establishments served or, (2) at the same location as one of these establishments but were not operated as an integral part thereof and served two or more establishments. The functions of employees in central administrative offices include general company policy determination, planning and management (that is, company purchasing, accounting, general engineering, direction of company personnel matters, and legal and patent matters). Auxiliaries are storage facilities, garages, repair shops, purchasing offices, sales promotion offices, and research laboratories serving the plants or central management of the company.

**Standard Metropolitan Statistical Areas**—Standard metropolitan statistical areas (SMSA) are integrated economic and social units with a large volume of daily travel and communication between the central city and outlying parts of the area.<sup>1</sup> Each area (except in New England) consists of one whole county or more. An area may contain not only highly industrialized counties but also adjoining counties which, though primarily residential in character, contribute significantly to the industrial counties' labor force and are socially and economically integrated with the central city. These areas are defined by the Federal Committee on Standard Metropolitan Statistical Areas of the Office of Management and Budget for general-purpose use throughout the Federal Government in presenting economic and social data. In the New England States, similar intergration criteria are applied in defining

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<sup>1</sup> Each standard metropolitan statistical area must include either (1) a city with 50,000 or more inhabitants, or (2) a city having a population of at least 25,000 which (a) with the addition of the population of contiguous places has a population density of at least 1,000 persons per square mile; (b) constitutes, for general economic and social purposes, a single community with a combined population of at least 50,000; and (c) includes a total population of at least 75,000 in the county or counties in which the city and contiguous places are located.

SMSA's on a city and town basis because towns rather than counties are regarded as the significant unit in this region of the country.

The requirement that each SMSA consist of county units (except in New England) sometimes results in the inclusion in an area of considerable amount of territory which would not ordinarily be considered "metropolitan," much less "industrial." It is recognized that metropolitan areas could be more accurately defined in terms of smaller area segments such as minor civil

divisions, but the usefulness of areas so defined would be limited by the fact that many types of economic and social data are available only on a county basis.

Each SMSA is designated by the name of the principal city of the area. In addition to the name of the principal city, the area title may include one or two additional city names.

The data for SMSA's which changed definition since the 1967 census have not been retabulated on the new basis for years prior to 1972.







## PRELIMINARY REPORT

**1972 CENSUS OF  
MANUFACTURES**

## AREA SERIES

72(P)-S15

U. S. DEPARTMENT OF COMMERCE • Social and Economic Statistics Administration • BUREAU OF THE CENSUS

ed April 1974

**Indiana**

Value added by manufacturing in 1972 in the State of Indiana amounted to \$14,280 million, an 18-percent increase from 1971 and a 39-percent increase from 1967.

This report presents preliminary results from the 1972 Census of Manufactures for the State, its Standard Metropolitan Statistical Areas, and its counties.

Data are provided for industry groups within the State. Historical data, back to 1958, are included for the State as a whole,

and 1967 figures on employment and value added are provided for the smaller areas.

The figures in this report have been subjected to only preliminary review and must be regarded as approximations of the final census figures. No adjustments have been made in the value figures for changes in price level.

For an explanation of the terms used in the tables, see the appendix at the end of this report.

**TABLE 1. General Statistics for the State: 1972 and Earlier Years**

(See appendix, Explanation of Terms)

Year	Establishments		All employees <sup>1</sup>		Production workers			Value added by manufacture	Cost of materials <sup>2</sup>	Value of shipments <sup>2</sup>	Capital expenditures, new
	Total	With 20 employees or more	Number	Payroll	Number	Man-hours	Wages				
	(number)	(number)	(1,000)	(million dollars)	(1,000)	(millions)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(million dollars)
INDIANA											
1972 Census .....	7,258	2,994	706.3	6,911.1	527.2	1,044.0	4,660.2	14,280.4	15,385.0	29,318.0	857.0
1971 ASM .....	(NA)	(NA)	665.1	6,003.1	491.0	957.4	3,957.9	12,073.9	13,281.1	25,346.0	847.1
1970 ASM .....	(NA)	(NA)	696.7	5,819.3	516.7	1,013.0	3,844.9	11,469.1	12,612.3	24,048.2	1,016.2
1969 ASM .....	(NA)	(NA)	743.8	5,916.6	564.5	1,122.7	4,024.9	11,857.4	13,436.5	25,057.1	1,168.4
1968 ASM .....	(NA)	(NA)	715.2	5,423.3	542.4	1,085.4	3,699.9	11,250.2	12,122.7	23,348.0	997.5
1967 Census .....	6,920	2,917	710.2	5,023.2	543.6	1,078.1	3,453.5	10,308.0	11,706.0	21,856.0	1,004.4
1966 ASM .....	(NA)	(NA)	706.7	4,897.6	544.2	1,114.9	3,421.2	10,116.7	11,813.2	21,647.5	1,075.8
1965 ASM .....	(NA)	(NA)	666.6	4,449.9	511.4	1,047.0	3,118.6	9,316.7	10,731.6	19,921.5	1,050.1
1964 ASM .....	(NA)	(NA)	625.1	4,044.5	473.2	969.3	2,792.4	8,250.8	9,475.5	17,605.8	908.3
1963 Census .....	6,860	2,547	609.8	3,794.3	463.1	937.2	2,622.1	7,726.9	(NA)	(NA)	555.2
1962 ASM .....	(NA)	(NA)	596.5	3,590.6	452.6	924.2	2,472.0	7,092.3	(NA)	(NA)	381.9
1961 ASM .....	(NA)	(NA)	566.9	3,272.4	424.7	844.7	2,206.1	6,331.8	(NA)	(NA)	379.9
1960 ASM .....	(NA)	(NA)	589.8	3,311.8	442.9	882.2	2,255.8	6,259.8	(NA)	(NA)	549.2
1959 ASM .....	(NA)	(NA)	580.7	3,228.4	438.6	887.5	2,216.6	6,323.8	(NA)	(NA)	389.5
1958 Census .....	6,612	2,444	551.0	2,874.7	407.5	796.0	1,912.8	5,502.1	(NA)	(NA)	515.3

Note: "ASM" data are based on a representative sample of manufacturing establishments canvassed in the Annual Survey of Manufactures. These estimates may differ from the results of a complete canvass of all manufacturing establishments. The standard errors associated with these estimates are published in the annual survey of manufactures volumes for this period. For comparative purposes, the 1972 ASM estimate for the State of Indiana was 693 thousand employees, and \$13,723 million in value added with corresponding standard error of estimate of 1 and 1.

(NA) Not available.

<sup>1</sup>Includes employment and payroll at central administrative offices and auxiliary units. (For a definition of these units, see appendix.)

<sup>2</sup>The total cost of materials and value of shipments may include extensive duplication arising from shipments between establishments in the same industry classification. (For a more complete explanation, see appendix.)

TABLE 2. General Statistics for the State, Standard Metropolitan Statistical Areas, and Counties: 1972 and 1967

(See appendix, Explanation of Terms)

State, standard metropolitan statistical areas, and counties <sup>1</sup>	1972											1967	
	Establishments		All employees <sup>2</sup>		Production workers			Value added by manufacture	Cost of materials <sup>3</sup>	Value of shipments <sup>3</sup>	Capital expenditures, new	All employees	Value added by manufacture
	Total	With 20 employees or more	Number	Payroll	Number	Man-hours	Wages						
	(number) <sup>4</sup>	(number)	(1,000)	(million dollars)	(1,000)	(million)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(1,000)	(million dollars)
INDIANA, TOTAL . . . . .	7 258	2 994	706.3	6 911.1	527.2	1 044.0	4 660.2	14 280.4	15 385.0	29 318.0	857.0	710.2	10 308.0
CHICAGO, IL-NORTHWESTERN INDIANA STANDARD CONSOLIDATED AREA <sup>4</sup> . . . . .	14 318	5 667	1 016.5	10 292.4	682.6	1 353.4	5 994.8	20 627.2	21 693.1	42 031.7	1 341.7	1 088.1	15 561.9
STANDARD METROPOLITAN STATISTICAL AREAS <sup>4</sup>													
ANDERSON . . . . .	142	51	26.5	306.2	21.4	43.0	234.8	604.7	375.0	963.3	14.4	28.4	453.5
CINCINNATI . . . . .	2 026	847	157.6	1 607.9	97.6	196.4	852.9	3 593.8	3 090.3	6 627.0	166.8	166.9	2 704.2
PORTION IN OHIO . . . . .	1 806	761	143.6	1 419.4	87.3	175.3	769.3	3 254.4	2 815.5	6 045.6	156.5	154.8	2 477.1
PORTION IN INDIANA . . . . .	29	11	3.9	36.8	3.3	6.7	28.7	159.1	70.9	229.4	3.1	3.4	118.8
PORTION IN KENTUCKY . . . . .	191	75	10.1	91.7	7.0	14.4	54.9	180.3	203.9	352.0	7.2	8.7	108.3
EVANSVILLE . . . . .	381	153	36.0	319.7	26.1	51.8	216.0	900.1	919.1	1 827.8	124.9	34.0	527.1
PORTION IN INDIANA . . . . .	325	128	33.0	299.8	23.9	47.4	203.6	862.7	888.7	1 762.5	(D)	31.0	498.9
PORTION IN KENTUCKY . . . . .	56	25	3.0	19.9	2.2	4.4	12.4	37.4	30.4	65.3	(D)	3.0	28.2
FORT WAYNE . . . . .	558	247	59.1	605.2	40.2	80.9	366.4	1 072.8	1 520.1	2 562.1	45.1	53.8	781.8
GARY-HAMOND-EAST CHICAGO . . . . .	452	208	100.2	1 149.9	77.5	153.1	823.0	2 156.1	3 599.0	5 695.0	257.2	105.0	1 806.6
INDIANAPOLIS . . . . .	1 486	519	121.5	1 303.0	82.3	165.9	781.8	2 609.3	2 083.0	4 567.9	16.4	134.7	1 855.6
LAFAYETTE-WEST LAFAYETTE . . . . .	95	53	11.1	107.8	8.3	16.3	69.7	261.2	250.1	507.4	23.7	10.9	171.6
LOUISVILLE . . . . .	997	458	113.0	1 077.4	82.4	170.5	735.7	3 133.8	3 663.0	6 591.9	125.8	109.9	2 082.5
PORTION IN INDIANA . . . . .	147	60	13.8	98.7	10.1	17.9	66.8	289.8	270.0	552.0	9.8	20.1	290.5
PORTION IN KENTUCKY . . . . .	850	398	99.2	978.7	72.3	152.6	668.9	2 844.0	3 393.0	6 039.9	116.0	89.8	1 792.0
MUNCIE . . . . .	185	73	17.1	163.5	12.8	23.7	114.5	275.6	316.8	596.6	8.6	18.6	263.5
SOUTH BEND . . . . .	484	191	30.9	297.6	21.9	43.2	191.6	553.2	718.4	1 262.8	21.4	35.0	458.4
TERRE HAUTE . . . . .	219	76	15.5	130.4	11.2	22.1	87.4	326.9	312.4	631.4	22.4	14.0	184.5
COUNTIES													
ADAMS . . . . .	45	30	4.8	36.8	3.8	7.2	26.1	75.2	183.5	256.9	3.2	4.0	49.2
ALLEN . . . . .	418	172	46.2	499.6	30.1	60.9	292.1	842.4	1 211.2	2 028.4	30.6	42.9	617.5
BARTHOLOMEW . . . . .	68	31	15.8	164.5	10.3	19.2	93.5	326.1	292.1	604.4	34.8	14.4	203.2
BENTON . . . . .	8	4	3	1.6	3	5	1.4	3.2	3.2	6.5	1	3	2.1
BLACKFORD . . . . .	33	13	2.5	19.8	1.9	3.4	13.4	58.4	46.5	104.7	1.2	2.2	53.8
BOONE . . . . .	38	10	1.5	11.6	1.0	2.0	6.8	18.5	20.7	41.5	1.0	1.9	29.5
CARROLL . . . . .	19	9	1.4	9.1	1.2	2.4	7.1	20.8	28.9	48.8	1.7	1.8	8.7
CASS . . . . .	59	26	4.5	36.6	3.4	6.9	25.8	81.8	155.8	237.8	3.6	3.7	46.2
CLARK . . . . .	77	31	9.6	69.9	6.6	11.3	45.2	213.3	195.4	402.2	7.5	15.0	231.8
CLINTON . . . . .	43	22	3.9	26.6	3.3	6.7	20.6	65.4	90.4	155.2	2.7	2.8	30.3
DAVIESS . . . . .	37	13	1.8	13.8	1.5	2.8	10.8	29.2	35.8	64.5	1.1	2.2	17.6
DEARBORN . . . . .	29	11	3.9	36.8	3.3	6.7	28.7	159.1	70.9	229.4	3.1	3.4	118.8
DECATUR . . . . .	26	11	2.2	17.3	1.8	3.8	13.2	48.9	41.2	89.9	2.7	1.5	29.5
DE KALB . . . . .	60	32	5.1	43.4	3.9	7.7	29.9	90.2	98.4	184.2	5.7	4.2	52.3
DELAWARE . . . . .	185	73	17.1	163.5	12.8	23.7	114.5	275.6	316.8	596.6	8.6	18.6	263.5
DUBOIS . . . . .	98	56	6.4	47.6	5.2	11.3	34.2	99.4	96.5	195.9	5.0	5.2	57.6
ELKHART . . . . .	602	300	38.9	356.3	29.1	55.9	230.1	757.7	866.1	1 604.6	41.8	31.3	481.7
FAYETTE . . . . .	35	14	7.3	65.7	5.9	11.7	48.0	123.0	143.7	265.0	8.0	6.6	73.5
FLOYD . . . . .	70	29	4.2	28.8	3.5	6.6	21.6	76.5	74.6	149.8	2.3	5.1	58.7
FOUNTAIN . . . . .	27	8	2.6	20.4	2.2	4.6	16.2	36.7	23.9	60.4	1.9	2.4	24.2
FRANKLIN . . . . .	14	5	1.8	4.8	1.7	1.4	3.9	30.2	23.4	51.2	(D)	1.8	5.6
FULTON . . . . .	40	20	2.9	23.3	2.3	4.4	16.1	47.0	46.9	93.3	1.4	1.7	19.4
GIBSON . . . . .	33	9	1.7	15.0	1.1	2.2	7.3	23.3	23.0	45.1	1.7	2.6	23.4
GRANT . . . . .	122	53	16.1	166.7	13.2	27.6	128.6	329.8	369.7	698.9	12.0	17.0	274.5
HAMILTON . . . . .	65	19	3.3	28.8	2.5	4.9	20.3	52.9	40.0	91.5	4.1	3.2	35.9
HANCOCK . . . . .	42	13	2.1	22.9	1.2	2.3	8.3	28.4	30.0	56.9	4.0	1.5	9.7
HARRISON . . . . .	22	8	1.3	7.8	1.1	2.2	6.5	15.9	21.5	36.9	1.8	1.9	9.2
HENRY . . . . .	54	22	5.4	61.7	4.3	9.2	47.4	110.8	72.2	182.9	17.9	5.4	87.8
HOWARD . . . . .	90	31	23.2	271.0	18.8	38.1	206.0	534.4	308.0	835.5	24.9	21.2	313.8
HUNTINGTON . . . . .	72	37	5.1	36.2	4.0	8.0	23.9	67.4	68.2	134.2	3.0	5.8	55.8
JACKSON . . . . .	60	32	4.4	30.2	3.8	7.7	24.1	64.9	58.9	121.5	4.9	4.5	45.3
JASPER . . . . .	22	7	5.3	63.0	2.6	5.1	21.9	113.0	59.5	176.4	1.8	1.1	8.4
JAY . . . . .	31	17	4.4	33.5	3.6	7.1	26.5	69.0	60.1	128.5	5.9	4.3	42.6
JEFFERSON . . . . .	35	17	3.3	22.5	2.6	5.1	15.0	55.4	44.6	99.0	1.5	2.8	28.2
JENNINGS . . . . .	14	8	1.1	7.8	1.9	1.9	6.4	13.9	14.6	28.4	1.0	1.9	8.1
JOHNSON . . . . .	51	16	2.5	21.3	2.1	4.5	16.7	45.4	48.5	94.1	1.6	2.7	41.5
KNOX . . . . .	49	16	2.4	20.7	1.9	4.1	15.2	48.6	54.4	96.8	2.3	2.4	30.1
KOSCIUSKO . . . . .	138	59	9.1	77.2	7.2	14.8	54.2	169.5	138.5	303.7	11.7	7.3	117.3
LAGRANGE . . . . .	48	19	2.2	20.6	1.8	3.4	14.6	42.6	74.6	115.2	2.9	1.2	16.5
LAKE . . . . .	385	179	89.4	1 022.1	70.0	138.0	741.6	1 863.3	3 097.6	4 914.3	216.0	98.0	1 698.4
LA PORTE . . . . .	169	90	16.4	133.4	12.0	23.6	88.2	292.8	275.8	559.4	13.9	17.6	224.6
LAWRENCE . . . . .	56	24	3.7	35.5	3.1	6.2	28.4	64.9	73.2	137.0	5.1	4.3	52.7
MADISON . . . . .	142	51	26.5	306.2	21.4	43.0	234.8	604.7	375.0	963.3	14.4	28.4	453.5
MARION . . . . .	1 168	420	106.7	1 178.9	71.2	143.6	702.4	2 379.0	1 872.4	4 129.0	(D)	120.2	1 679.6
MARSHALL . . . . .	109	52	4.4	34.9	3.5	6.8	24.3	77.2	105.3	185.4	4.3	3.4	37.0
MARTIN . . . . .	11	5	1.8	5.4	1.7	1.5	4.4	24.7	17.8	42.6	1.0	1.6	17.2
MIAMI . . . . .	51	26	3.1	19.9	2.5	4.6	15.0	45.0	36.2	81.9	2.1	2.7	28.2
MONROE . . . . .	62	26	12.2	85.8	10.9	20.0	68.1	322.4	414.1	723.0	5.7	10.4	197.1
MONTGOMERY . . . . .	41	21	4.4	45.7	3.4	7.2	32.9	79.5	75.3	152.8	7.9	5.2	63.1
MORGAN . . . . .	37	11	1.9	6.2	1.7	1.4	4.2	11.4	9.1	20.2	1.3	1.3	10.8
NEWTON . . . . .	13	4	1.9	4.8	1.7	1.7	3.1	7.4	7.3	14.7	(D)	1.6	5.6
NOBLE . . . . .	82	43	5.2	38.4	4.1	8.0	27.5	75.0	76.2	149.8	3.4	4.7	46.9
ORANGE . . . . .	26	9	1.2	8.4	1.1	2.2	5.9	230.					



TABLE 2. General Statistics for the State, Standard Metropolitan Statistical Areas, and Counties: 1972 and 1967—Continued

(See appendix, Explanation of Terms)

State, standard metropolitan statistical areas, and counties <sup>1</sup>	1972										1967		
	Establishments		All employees <sup>2</sup>		Production workers			Value added by manufac- ture	Cost of materials <sup>3</sup>	Value of shipments <sup>3</sup>	Capital expendi- tures, new	All employees	Value added by manufac- ture
	Total	With 20 employees or more	Number	Payroll	Number	Man-hours	Wages						
	(number)	(number)	(1,000)	(million dollars)	(1,000)	(million)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(1,000)	(million dollars)
COUNTIES—CONTINUED													
TIPPECANOE . . . . .	95	53	11.1	107.8	8.3	16.3	69.7	261.2	250.1	507.4	23.7	10.9	171.6
TIPTON . . . . .	20	6	.8	7.1	.6	1.2	5.2	15.9	20.8	37.2	1.1	.9	11.3
VANDERBURGH . . . . .	242	99	25.8	220.8	18.7	35.9	149.6	527.9	532.4	1 063.7	22.5	(D)	(D)
VIGO . . . . .	142	55	13.3	114.4	9.5	18.9	76.7	284.0	292.0	569.4	19.2	11.8	158.8
WABASH . . . . .	73	32	6.7	49.5	5.3	10.4	36.0	107.0	100.4	207.4	4.4	7.0	86.1
WASHINGTON . . . . .	27	11	2.5	14.4	2.2	4.2	11.9	26.2	29.0	53.8	2.0	1.9	15.8
WAYNE . . . . .	123	55	12.0	112.4	8.9	17.6	75.5	205.5	169.6	369.3	9.9	15.6	194.4
WELLS . . . . .	35	13	3.0	25.4	2.4	5.1	18.3	65.0	27.0	92.6	5.6	2.7	62.8
WHITE . . . . .	32	9	2.0	13.1	1.8	3.1	10.7	18.2	21.4	39.6	.7	(D)	(D)
WHITLEY . . . . .	47	21	2.7	19.5	2.3	4.4	14.7	40.3	55.9	95.1	3.0	2.0	31.2

(D) Withheld to avoid disclosing figures for individual companies.

<sup>1</sup>Some counties were withheld from publication in order to (a) avoid disclosing figures for individual companies or (b) permit further checking of the figures for smaller counties. Additional detail will appear in the final report for this State.<sup>2</sup>Includes employment and payroll at central administrative offices and auxiliary units. (For a definition of these units, see appendix.)<sup>3</sup>The total cost of materials and value of shipments may include extensive duplication arising from shipments between establishments in the same industry classification. (For a more complete explanation, see appendix.)<sup>4</sup>The standard consolidated area and standard metropolitan statistical areas are defined as follows:

CHICAGO, IL-NORTHWESTERN INDIANA SCA: Consists of Chicago, IL, SMSA (Cook, Du Page, Kane, Lake, McHenry, and Will Counties, IL) and Gary-Hammond-East Chicago, IN SMSA

ANDERSON SMSA: Coextensive with Madison County, IN.

CINCINNATI, OH-KY-IN, SMSA: Consists of Clermont, Hamilton, and Warren Counties, OH; Boone, Campbell, and Kenton Counties, KY; and Dearborn County, IN.

EVANSVILLE, IN-KY, SMSA: Consists of Gibson, Posey, Vanderburgh, and Warrick Counties, IN, and Henderson County, KY.

FORT WAYNE SMSA: Consists of Adams, Allen, De Kalb, and Wells Counties, IN.

GARY-HAMMOND-EAST CHICAGO SMSA: Consists of Lake and Porter Counties, IN.

INDIANAPOLIS SMSA: Consists of Boone, Hamilton, Hancock, Hendricks, Johnson, Marion, Morgan, and Shelby Counties, IN.

LAFAYETTE-WEST LAFAYETTE SMSA: Coextensive with Tippecanoe County, IN.

LOUISVILLE, KY-IN, SMSA: Consists of Bullitt, Jefferson, and Oldham Counties, KY, and Clark and Floyd Counties, IN.

MUNCIE SMSA: Coextensive with Delaware County, IN.

SOUTH BEND SMSA: Consists of Marshall and St. Joseph Counties, IN.

TERRE HAUTE SMSA: Consists of Clay, Sullivan, Vermillion, and Vigo Counties, IN.

TABLE 3. General Statistics for the State, by Industry Groups and Industries: 1972 and 1967

(See appendix, Explanation of Terms)

Code	Industry	1972											1967	
		Establishments		All employees		Production workers			Value added by manufacture	Cost of materials <sup>1</sup>	Value of shipments <sup>1</sup>	Capital expenditures, new	All employees	Value added by manufacture
		Total (number)	With 20 employees or more (number)	Number (1,000)	Payroll (million dollars)	Number (1,000)	Man-hours (million)	Wages (million dollars)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(1,000)	(million dollars)
	ALL INDUSTRIES, TOTAL <sup>2</sup>	7 258	2 994	706.3	6 911.1	527.2	1 044.0	4 660.2	14 280.4	15 385.0	29 318.0	857.0	710.2	10 308.0
20	FOOD AND KINDRED PRODUCTS, . . . .	601	301	36.4	311.8	24.1	50.0	190.3	935.5	1 762.8	2 722.2	55.9	42.7	757.9
201	MEAT PRODUCTS, . . . . .	107	37	5.8	53.1	4.3	8.8	35.0	102.8	440.4	542.6	4.6	7.5	92.7
2011	MEATPACKING PLANTS . . . . .	72	16	3.7	38.1	2.7	5.6	25.1	61.1	349.3	410.1	3.2	4.8	59.0
2013	SAUSAGES AND OTHER PREPARED MEATS, .	13	10	.9	8.7	.6	1.3	5.1	27.1	49.8	76.6	.5	.9	21.3
202	DAIRY PRODUCTS . . . . .	95	58	4.6	39.6	2.1	4.7	16.8	124.0	251.2	376.4	13.0	5.9	114.4
2022	CHEESE, NATURAL AND PROCESSED, . . .	7	3	.3	2.8	.2	.6	1.7	8.3	27.8	35.7	.4	.3	4.1
2024	ICE CREAM AND FROZEN DESSERTS, . . .	20	10	.9	7.0	.5	1.0	3.4	12.8	27.8	41.1	3.0	.6	10.1
2026	FLUID MILK . . . . .	57	38	3.0	25.6	1.1	2.4	8.9	66.4	149.4	215.2	7.0	4.2	57.8
203	PRESERVED FRUITS AND VEGETABLES, . .	66	44	5.1	30.4	4.4	8.6	24.2	103.3	164.8	268.1	7.5	(NA)	(NA)
2032	CANNED SPECIALTIES . . . . .	9	6	2.4	16.2	2.1	4.5	13.1	57.0	79.8	136.7	1.9	EE	(D)
2033	CANNED FRUITS AND VEGETABLES . . . .	35	26	1.6	7.1	1.4	2.4	5.7	23.9	38.3	62.2	4.6	2.3	26.3
2036	FROZEN SPECIALTIES . . . . .	9	5	.4	2.1	.3	.6	1.7	8.8	16.2	25.0	.6	(NA)	(NA)
204	GRAIN MILL PRODUCTS, . . . . .	78	38	4.8	46.7	3.1	7.0	30.6	181.0	279.0	457.6	12.0	5.7	137.9
205	BAKERY PRODUCTS, . . . . .	74	36	4.6	40.3	2.6	5.3	20.6	85.8	70.8	156.7	2.8	5.5	65.8
206	SUGAR AND CONFECTIONERY PRODUCTS, .	16	7	1.5	10.2	1.3	2.5	8.1	23.8	36.8	60.5	1.2	(NA)	(NA)
2065	CONFECTIONERY PRODUCTS . . . . .	13	6	1.5	9.9	1.2	2.4	7.8	23.2	35.7	58.7	1.1	1.3	18.0
207	FATS AND OILS, . . . . .	28	14	1.9	18.1	1.4	2.9	13.4	83.4	311.1	394.8	4.2	(NA)	(NA)
2077	ANIMAL AND MARINE FATS AND OILS, . .	21	8	.4	3.1	.3	.6	2.0	8.1	14.6	22.5	1.2	.4	4.0
208	BEVERAGES, . . . . .	79	47	6.1	57.4	3.6	7.6	32.2	211.2	159.8	370.8	7.7	7.5	195.2
2086	BOTTLED AND CANNED SOFT DRINKS . . .	69	41	3.1	26.5	1.0	2.1	6.7	63.2	81.6	145.0	4.7	3.9	52.8
209	MISC. FOODS AND KINDRED PRODUCTS, .	58	20	2.0	15.9	1.3	2.6	9.4	44.0	48.9	94.7	2.9	(NA)	(NA)
2099	FOOD PREPARATIONS, NEC . . . . .	37	16	1.6	13.2	1.1	2.0	7.5	40.4	45.3	87.4	(D)	1.5	18.0
22	TEXTILE MILL PRODUCTS, . . . . .	16	8	1.0	7.7	.7	1.5	4.3	17.8	26.9	43.0	.4	1.0	10.8
229	MISCELLANEOUS TEXTILE GOODS, . . . .	10	5	.5	3.9	.3	.7	2.2	8.3	9.1	17.4	.3	BB	(D)
23	APPAREL, OTHER TEXTILE PRODUCTS, . .	173	90	12.6	65.7	10.9	19.5	48.5	117.6	112.5	229.8	2.2	12.8	85.9
2311	MEN'S AND BOYS' SUITS AND COATS, . .	3	3	.8	4.5	.7	1.2	3.4	6.0	2.0	8.0	.1	CC	(D)
232	MEN'S AND BOYS' FURNISHINGS, . . . .	34	24	5.5	28.7	4.8	8.9	21.2	45.2	59.8	104.8	.8	5.2	32.5
2321	MEN'S AND BOYS' SHIRTS AND NIGHTWEAR	7	5	1.2	5.2	1.1	2.1	4.4	8.9	5.9	14.0	.1	1.1	5.2
2328	MEN'S AND BOYS' WORK CLOTHING, . . .	11	9	1.8	8.2	1.6	3.0	7.0	10.5	19.6	30.5	.2	2.3	12.4
233	WOMEN'S, AND MISSES' OUTERWEAR, . .	24	20	2.3	11.1	1.9	3.3	8.4	17.6	12.1	29.3	.3	1.7	13.4
2335	WOMEN'S AND MISSES' DRESSES, . . . .	10	7	.7	3.1	.7	1.1	2.6	5.1	1.2	6.2	(2)	.8	8.2
2337	WOMEN'S AND MISSES' SUITS AND COATS, .	7	6	.7	3.6	.6	.9	2.5	4.8	2.5	7.4	.2	BB	(D)
238	MISC. APPAREL AND ACCESSORIES, . . . .	9	5	.5	2.8	.4	.8	2.2	5.8	4.6	10.4	(2)	1.3	7.4
239	MISC. FABRICATED TEXTILE PRODUCTS, . .	93	30	2.7	14.9	2.3	4.1	10.2	30.7	29.1	59.7	.9	2.0	15.2
2391	CURTAINS AND DRAPERIES . . . . .	33	12	1.3	6.3	1.1	2.1	4.4	14.6	11.7	26.5	.3	.5	3.4
2392	HOUSE FURNISHINGS, NEC . . . . .	17	5	.5	3.5	.4	.8	2.1	6.1	5.4	11.5	.2	.6	4.7
2394	CANVAS AND RELATED PRODUCTS, . . . .	17	5	.5	3.1	.4	.7	2.1	5.4	5.8	10.9	.2	.5	3.9
2399	FABRICATED TEXTILE PRODUCTS, NEC . . .	16	6	.3	1.7	.3	.5	1.2	3.7	2.9	6.5	.2	.2	1.3
24	LUMBER AND WOOD PRODUCTS . . . . .	595	197	19.6	162.5	16.4	31.9	118.3	320.1	519.5	839.2	18.5	(NA)	(NA)
242	SAWMILLS AND PLANING MILLS . . . . .	200	31	1.9	11.2	1.5	3.1	8.9	25.1	25.1	49.8	1.6	2.2	16.8
2421	SAWMILLS AND PLANING MILLS, GENERAL, .	173	17	1.1	7.1	.9	1.8	5.8	17.4	18.7	34.3	1.2	1.5	12.5
243	MILLWORK, PLYWOOD, STRUC. MEMBERS, .	142	67	7.1	54.9	5.9	12.1	40.5	112.3	152.1	265.8	6.9	(NA)	(NA)
2431	MILLWORK . . . . .	60	24	3.0	22.1	2.4	4.8	16.1	43.2	71.3	114.8	2.7	(NA)	(NA)
2434	WOOD KITCHEN CABINETS, . . . . .	41	14	1.6	14.5	1.4	2.9	12.1	36.6	39.5	75.8	2.7	(NA)	(NA)
2435	HARDWOOD VENEER AND PLYWOOD, . . . .	22	19	1.9	13.9	1.7	3.5	9.8	22.9	27.2	51.5	.8	(NA)	(NA)
2439	STRUCTURAL WOOD MEMBERS, NEC . . . .	19	10	.6	4.4	.4	.9	2.6	9.6	14.1	23.7	.7	(NA)	(NA)
244	WOOD CONTAINERS, . . . . .	34	14	.9	4.2	.8	1.3	3.0	7.4	7.9	15.4	.4	(NA)	(NA)
2448	WOOD PALLETS AND SKIDS . . . . .	20	10	.5	2.3	.4	.7	1.6	3.6	5.0	8.6	.3	(NA)	(NA)
245	WOOD BUILDINGS AND MOBILE HOMES, . .	71	63	7.8	79.9	6.4	12.1	56.7	151.7	309.3	460.3	8.1	(NA)	(NA)
2451	MOBILE HOMES . . . . .	60	54	6.0	63.8	5.0	9.3	47.4	117.6	262.2	379.9	5.5	(NA)	(NA)
2452	PREFABRICATED WOOD BUILDINGS . . . .	11	9	1.8	16.1	1.4	2.8	9.4	34.1	47.0	80.5	2.6	(NA)	(NA)
249	MISCELLANEOUS WOOD PRODUCTS, . . . .	110	22	1.8	11.5	1.6	3.1	8.6	22.1	23.5	44.8	1.5	(NA)	(NA)
2499	WOOD PRODUCTS, NEC . . . . .	104	18	1.6	10.1	1.4	2.7	7.6	18.3	18.2	36.4	1.4	(NA)	(NA)
25	FURNITURE AND FIXTURES . . . . .	250	146	24.8	171.5	20.6	40.2	126.0	339.0	270.0	590.8	12.3	24.0	233.7
251	HOUSEHOLD FURNITURE, . . . . .	160	103	18.9	127.4	15.9	30.9	96.8	229.4	199.5	425.6	8.8	(NA)	(NA)
2511	WOOD HOUSEHOLD FURNITURE . . . . .	90	58	11.2	73.2	9.8	19.6	58.1	137.2	118.1	253.4	5.7	(NA)	(NA)
2512	UPHOLSTERED HOUSEHOLD FURNITURE, . .	31	22	2.7	18.4	2.3	4.5	14.0	33.1	25.5	58.4	.6	(NA)	(NA)
2514	METAL HOUSEHOLD FURNITURE, . . . . .	10	3	2.2	15.7	1.8	3.0	10.6	27.8	21.0	48.1	1.2	1.7	19.1
2515	MATTRESSES AND BEDSPRINGS, . . . . .	19	7	2.0	15.9	1.4	2.8	11.0	24.0	27.7	51.4	1.0	2.5	23.0
252	OFFICE FURNITURE . . . . .	25	16	2.4	17.0	1.9	4.2	12.9	31.9	19.6	51.0	.4	2.1	22.6
2521	WOOD OFFICE FURNITURE, . . . . .	15	11	1.4	9.9	1.2	2.7	7.9	19.5	12.2	31.1	.3	1.3	13.4
2522	METAL OFFICE FURNITURE . . . . .	10	5	1.0	7.1	.7	1.4	5.0	12.4	7.5	20.0	.1	.8	9.1
2531	PUBLIC BUILDING, RELATED FURNITURE . .	12	7	1.5	11.5	1.1	2.0	5.7	32.4	16.0	43.9	.9	.5	5.5
254	PARTITIONS AND FIXTURES, . . . . .	44	17	1.9	15.0	1.5	2.9	9.9	31.1	23.3	53.6	1.8	1.5	16.2
2541	WOOD PARTITIONS AND FIXTURES . . . .	37	12	.9	6.6	.7	1.4	4.7	13.4	10.5	23.3	.8	.7	5.9
2542	METAL PARTITIONS AND FIXTURES, . . . .	7	5	1.0	8.3	.8	1.6	5.2	17.7	12.8	30.3	1.0	.9	10.3
26	PAPER AND ALLIED PRODUCTS, . . . . .	136	100	12.9	114.5	9.9	20.5	79.5	227.4	255.9	481.1	13.4	13.7	165.2
2631	PAPERBOARD MILLS . . . . .	7	7	1.1	10.9	.9	2.0	8.2	25.0	23.6	48.7	2.7	1.4	23.7
264	MISC. CONVERTED PAPER PRODUCTS . . .	52	30	4.6	39.8	3.4	7.0	26.9	90.3	82.5	171.2	3.3	4.9	61.4
2641	PAPER COATING AND GLAZING, . . . . .	8	4	.6	5.8	.4	.8	3.3	14.2	20.8	35.2	.5	BB	(D)
2643	BAGS, EXCEPT TEXTILE BAGS, . . . . .	11	7	1.2	8.3	.9	1.8	5.5	15.5	16.2	30.8	.4	1.3	11.5

See footnotes at end of table.



TABLE 3. General Statistics for the State, by Industry Groups and Industries: 1972 and 1967—Continued

(See appendix, Explanation of Terms)

Code	Industry	1972											1967	
		Establishments		All employees		Production workers			Value added by manufacture	Cost of materials <sup>1</sup>	Value of shipments <sup>1</sup>	Capital expenditures, new	All employees	Value added by manufacture
		Total	With 20 employees or more	Number	Payroll	Number	Man-hours	Wages						
		(number)	(number)	(1,000)	(million dollars)	(1,000)	(million)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(1,000)	(million dollars)
2649	CONVERTED PAPER PRODUCTS, NEC. . . .	11	8	.6	4.4	.5	1.0	2.9	10.5	10.3	20.7	.9	(NA)	(NA)
265	PAPERBOARD CONTAINERS AND BOXES. . .	71	58	7.0	61.1	5.3	11.0	42.3	108.4	143.7	251.0	6.8	7.0	75.6
2651	FOLDING PAPERBOARD BOXES . . . . .	15	11	1.6	13.8	1.2	2.5	9.4	24.8	20.6	44.4	.5	2.0	20.2
2653	CORRUGATED AND SOLID FIBER BOXES . .	38	30	4.0	36.9	3.0	6.3	25.6	59.8	86.9	147.0	5.8	3.9	40.5
2654	SANITARY FOOD CONTAINERS . . . . .	6	6	.5	4.1	.4	.8	2.7	9.5	19.3	28.5	.2	CC	(D)
27	PRINTING AND PUBLISHING. . . . .	899	197	27.3	238.7	17.4	33.4	149.2	454.1	212.6	658.0	25.6	26.9	327.1
2711	NEWSPAPERS . . . . .	216	63	9.9	82.7	4.7	8.6	41.4	158.8	43.4	202.0	8.1	9.4	116.1
2721	PERIODICALS. . . . .	36	6	.9	7.5	.6	1.2	4.7	11.5	10.8	24.4	.6	.9	12.0
273	BOOKS. . . . .	35	13	4.6	46.9	3.2	6.5	32.8	79.3	44.9	123.2	(D)	6.5	75.0
2741	MISCELLANEOUS PUBLISHING . . . . .	31	7	.9	6.1	.3	.6	2.0	25.4	11.6	36.4	.6	CC	(D)
275	COMMERCIAL PRINTING. . . . .	487	82	7.9	71.3	6.2	12.1	51.7	135.1	80.2	215.2	10.2	(NA)	(NA)
2751	COMMERCIAL PRINTING, LETTERPRESS . .	295	27	4.1	36.1	3.4	6.8	28.4	73.6	47.0	120.8	5.2	(NA)	(NA)
2761	MANIFOLD BUSINESS FORMS. . . . .	11	4	.7	6.1	.4	.9	3.6	16.5	9.3	26.2	.4	.8	15.4
2782	BLANKBOOKS AND LOOSELEAF BINDERS . .	8	4	.5	3.5	.5	.8	2.7	7.4	2.7	10.0	.1	8B	(D)
279	PRINTING TRADE SERVICES. . . . .	59	12	.8	8.2	.7	1.2	6.1	11.7	2.5	14.0	.4	(NA)	(NA)
2791	TYPESETTING. . . . .	40	7	.6	5.1	.5	.9	4.1	7.2	1.0	8.1	.3	.5	6.0
28	CHEMICALS AND ALLIED PRODUCTS. . .	216	83	23.2	300.1	10.6	30.4	133.4	1 237.7	478.8	1 703.5	54.4	24.7	833.3
281	INDUSTRIAL INORGANIC CHEMICALS . . .	21	11	1.0	10.2	.7	1.4	6.7	61.1	49.0	110.9	8.0	(NA)	(NA)
282	PLASTICS MATERIALS AND SYNTHETICS. .	8	8	1.4	16.9	1.0	2.1	10.6	126.9	58.1	178.1	12.9	(NA)	(NA)
283	DRUGS. . . . .	28	15	13.4	190.1	4.9	9.9	50.8	685.0	114.9	788.9	18.2	13.0	420.8
2834	PHARMACEUTICAL PREPARATIONS. . . . .	22	10	12.4	175.2	4.7	9.4	48.4	679.8	106.9	775.4	16.9	12.1	407.4
284	SOAPS, CLEANERS, AND TOILET GOODS. .	38	8	3.1	31.8	1.8	3.2	17.3	176.7	109.9	280.6	3.2	(NA)	(NA)
2851	PAINTS AND ALLIED PRODUCTS . . . . .	30	11	1.3	14.0	.7	1.3	5.4	28.8	32.8	61.9	.6	1.5	26.7
286	INDUSTRIAL ORGANIC CHEMICALS . . . .	8	6	1.1	12.0	.8	1.6	7.5	41.0	43.2	82.8	1.9	(NA)	(NA)
287	AGRICULTURAL CHEMICALS . . . . .	42	11	1.9	22.2	1.0	2.0	10.4	115.5	81.3	196.5	8.7	(NA)	(NA)
29	PETROLEUM AND COAL PRODUCTS. . . .	49	22	6.2	80.2	4.1	8.6	47.0	211.2	937.0	1 162.9	34.3	7.6	220.1
2911	PETROLEUM REFINING . . . . .	7	7	5.2	69.4	3.4	7.3	40.2	183.8	904.2	1 102.8	32.8	6.3	197.6
295	PAVING AND ROOFING MATERIALS . . . .	34	14	.9	10.1	.6	1.2	6.5	25.6	27.9	53.3	1.4	1.1	15.7
2951	PAVING MIXTURES AND BLOCKS . . . . .	29	11	.6	7.9	.4	.8	4.8	18.5	18.1	36.6	1.1	CC	(D)
30	RUBBER AND MISC. PLASTICS PROD. . .	279	156	31.9	264.3	25.6	51.6	193.0	515.8	439.0	945.1	38.0	(NA)	(NA)
3079	MISCELLANEOUS PLASTICS PRODUCTS. . .	208	106	16.5	125.4	13.3	26.7	89.4	248.3	208.5	450.1	26.6	(NA)	(NA)
32	STONE, CLAY, AND GLASS PRODUCTS . .	489	158	24.1	207.4	19.5	38.4	158.1	475.9	307.3	779.3	42.8	25.7	360.4
3221	GLASS CONTAINERS . . . . .	9	9	6.6	57.7	5.9	11.6	49.2	118.7	69.1	187.1	7.8	FF	(D)
3231	PRODUCTS OF PURCHASED GLASS, NEC . .	15	6	1.0	7.7	.8	1.6	5.6	15.6	12.1	27.2	(D)	.8	7.1
3241	CEMENT, HYDRAULIC. . . . .	5	4	.6	7.2	.5	1.0	5.3	33.1	20.4	51.1	3.0	1.6	34.7
325	STRUCTURAL CLAY PRODUCTS . . . . .	23	12	1.2	8.2	.1	1.8	6.5	13.0	6.3	19.6	.9	1.7	14.6
326	POTTERY AND RELATED PRODUCTS . . . .	12	5	.6	5.2	.5	1.1	4.3	8.9	5.5	14.3	.3	CC	(D)
3261	VITREOUS PLUMBING FIXTURES . . . . .	4	4	.5	4.7	.5	.9	3.9	8.1	5.2	13.2	.3	CC	(D)
327	CONCRETE, GYPSUM, PLASTER PRODUCTS	325	69	5.4	49.4	3.6	7.4	31.1	116.2	101.1	216.2	18.8	5.2	85.8
3271	CONCRETE BLOCK AND BRICK . . . . .	50	10	.8	6.4	.5	1.0	3.5	15.1	15.4	30.2	1.6	CC	(D)
3272	CONCRETE PRODUCTS, NEC . . . . .	128	22	1.8	15.4	1.4	2.8	10.4	30.3	20.7	50.4	2.3	1.5	20.0
3273	READY-MIXED CONCRETE . . . . .	142	33	2.2	21.6	1.3	2.5	12.5	46.1	45.6	91.4	5.1	2.3	36.3
329	MISC. NONMETALLIC MINERAL PRODUCTS	50	30	5.2	44.8	4.2	8.5	33.9	100.0	69.2	170.2	7.7	(NA)	(NA)
3295	MINERALS, GROUND OR TREATED. . . . .	11	4	.3	3.0	.2	.6	2.5	8.9	3.1	11.8	.2	.2	4.7
3296	MINERAL WOOL . . . . .	10	10	2.1	17.8	1.7	3.5	13.8	30.5	31.2	61.4	4.6	1.9	24.8
33	PRIMARY METAL INDUSTRIES . . . . .	272	169	102.4	1 173.7	83.2	169.4	886.8	2 200.8	3 304.4	5 418.9	234.4	111.0	1 817.9
331	BLAST FURNACE, BASIC STEEL PROD. . .	31	26	66.9	810.5	54.4	110.1	610.6	1 387.0	2 164.7	3 445.1	177.2	66.9	1 123.0
3312	BLAST FURNACES AND STEEL MILLS . . .	14	11	62.6	761.8	51.1	100.9	575.8	1 281.0	1 947.4	3 138.2	175.3	62.8	1 072.0
3315	STEEL WIRE AND RELATED PRODUCTS. . .	5	5	1.4	14.7	1.1	2.4	10.5	36.3	26.9	62.8	.6	1.1	15.6
332	IRON AND STEEL FOUNDRIES . . . . .	65	51	13.6	130.3	11.7	22.9	105.1	219.4	107.4	326.5	13.8	15.4	171.5
3321	GRAY IRON FOUNDRIES. . . . .	54	42	9.0	90.0	7.6	15.3	72.6	155.6	74.2	230.1	12.2	10.2	117.5
3325	STEEL FOUNDRIES, NEC . . . . .	7	5	3.2	28.3	2.8	5.2	23.2	43.5	20.4	64.8	.6	(NA)	(NA)
335	NONFERROUS ROLLING AND DRAWING . . .	45	36	14.2	150.8	10.9	23.4	109.0	413.7	795.8	1 221.4	28.1	15.6	300.2
3354	ALUMINUM EXTRUDED PRODUCTS . . . . .	12	9	2.7	27.9	2.1	4.5	20.7	42.3	77.2	120.3	2.9	(NA)	(NA)
3357	NONFERROUS WIRE DRAWING, INSULATING	19	17	5.9	55.1	4.6	10.0	41.4	150.6	357.2	504.5	8.7	5.7	144.7
3361	ALUMINUM FOUNDRIES . . . . .	40	18	2.4	25.4	2.0	4.1	20.5	43.1	49.4	92.7	3.1	2.9	42.9
3362	BRASS, BRONZE, AND COPPER FOUNDRIES.	18	9	.5	4.5	.5	.9	3.6	7.8	8.8	16.7	1.4	.5	7.1

See footnotes at end of table.

TABLE 3. General Statistics for the State, by Industry Groups and Industries: 1972 and 1967—Continued

(See appendix, Explanation of Terms)

Code	Industry	1972											1967	
		Establishments		All employees		Production workers			Value added by manufacture	Cost of materials <sup>1</sup>	Value of shipments <sup>1</sup>	Capital expenditures, new	All employees	Value added by manufacture
		Total	With 20 employees or more	Number	Payroll	Number	Man-hours	Wages						
		(number)	(number)	(1,000)	(million dollars)	(1,000)	(million)	(million dollars)					(1,000)	(million dollars)
34	FABRICATED METAL PRODUCTS. . . . .	812	414	68.3	611.2	53.2	105.0	439.6	1 154.9	1 337.4	2 489.2	62.0	(NA)	(NA)
341	METAL CANS AND SHIPPING CONTAINERS	12	11	2.0	21.7	1.7	3.7	17.5	44.6	79.6	121.0	6.3	(NA)	(NA)
342	CUTLERY, HANDTOOLS AND HARDWARE. .	60	28	5.1	40.6	4.0	7.9	29.7	88.0	73.7	160.3	(D)	4.4	59.6
3429	HARDWARE, NEC. . . . .	36	19	3.1	23.9	2.5	4.8	16.5	57.6	45.8	103.2	(D)	2.7	37.7
343	PLUMBING, HEATING, EXC. ELECTRIC.	23	18	24.5	96.4	8.2	16.6	70.0	187.9	255.5	441.1	11.4	(NA)	(NA)
3432	PLUMBING FITTINGS AND BRASS GOODS. .	5	5	1.8	14.5	1.4	3.0	10.5	49.0	44.3	91.5	1.6	1.3	25.9
344	FABRICATED STRUCTURAL METAL PROD. .	248	123	13.7	125.0	10.1	19.4	82.8	225.1	296.2	528.1	13.4	13.8	160.9
3441	FABRICATED STRUCTURAL METAL PRODUCTS	51	33	4.0	37.0	2.9	5.5	24.2	50.3	96.9	161.3	2.0	4.9	53.1
3442	METAL DOORS, SASH, AND TRIM. . . . .	36	17	2.6	21.4	1.9	3.8	14.2	30.6	43.4	77.0	4.0	2.1	19.6
3443	FABRICATED PLATEWORK (BOILERS SHOP).	44	20	3.0	30.0	2.1	4.2	19.4	65.6	51.7	110.1	2.5	3.0	32.4
3444	SHEET METALWORK. . . . .	79	37	2.2	21.2	1.7	3.2	14.6	42.2	52.5	93.2	2.4	2.1	28.2
3452	BOLTS, NUTS, RIVETS, AND WASHERS . .	17	13	1.5	12.7	1.1	2.2	8.8	33.1	24.8	55.9	.8	1.1	13.6
346	METAL FORGINGS AND STAMPINGS . . . .	114	71	16.0	171.8	13.1	26.7	132.2	303.5	338.9	646.5	13.5	(NA)	(NA)
3465	AUTOMOTIVE STAMPINGS . . . . .	30	26	8.9	110.2	7.4	15.4	87.2	186.8	197.4	386.9	8.5	(NA)	(NA)
3469	METAL STAMPINGS, NEC. . . . .	68	34	3.1	23.8	2.6	5.1	17.5	44.2	35.6	79.8	1.9	(NA)	(NA)
347	METAL SERVICES, NEC. . . . .	113	40	2.5	19.9	2.1	4.3	14.8	38.9	19.4	58.1	4.0	FF	(D)
3471	PLATING AND POLISHING. . . . .	89	31	1.9	13.7	1.6	3.3	10.3	26.3	8.1	34.2	1.4	1.8	20.5
3479	METAL COATING AND ALLIED SERVICES. .	24	9	.6	6.2	.5	1.0	4.5	12.6	11.3	23.9	2.6	CC	(D)
349	MISC. FABRICATED METAL PRODUCTS. .	152	76	9.7	80.3	7.5	15.0	55.9	161.5	153.4	309.8	6.8	(NA)	(NA)
3493	STEEL SPRINGS, EXCEPT WIRE . . . . .	4	4	.6	6.6	.5	1.1	5.2	12.0	13.4	24.9	.7	.5	7.3
3494	VALVES AND PIPE FITTINGS . . . . .	23	15	3.1	26.6	2.2	4.5	16.5	56.0	52.9	105.1	(D)	3.1	41.8
3495	WIRE SPRINGS . . . . .	15	14	1.6	14.2	1.3	2.8	10.7	25.8	25.0	50.9	1.4	(NA)	(NA)
3496	MISC. FABRICATED WIRE PRODUCTS . . . .	37	15	1.2	8.9	1.0	1.7	6.8	26.0	24.6	50.7	.7	(NA)	(NA)
3498	FABRICATED PIPE AND FITTINGS . . . . .	11	4	.6	3.6	.5	1.0	3.0	6.3	5.0	11.2	.1	EE	(D)
3499	FABRICATED METAL PRODUCTS, NEC. . . .	62	24	2.6	20.4	2.0	3.9	13.7	35.4	32.4	67.1	2.4	(NA)	(NA)
35	MACHINERY, EXCEPT ELECTRICAL. . . .	1 230	366	72.9	736.3	52.6	104.9	493.6	1 424.8	1 345.5	2 725.8	80.4	71.0	1 005.8
352	FARM AND GARDEN MACHINERY. . . . .	63	32	4.9	44.8	3.7	7.3	31.3	97.4	113.4	202.7	3.8	(NA)	(NA)
353	CONSTRUCTION AND RELATED MACHINERY	61	35	12.4	137.8	9.2	18.2	98.3	277.7	518.5	788.0	6.1	6.1	87.2
3534	ELEVATORS AND MOVING STAIRWAYS . . . .	5	4	1.1	9.0	.6	1.2	4.4	24.7	12.8	37.0	.5	EE	(D)
3536	HOISTS, CRANES, AND MONORAILS. . . . .	8	5	.3	3.0	.2	.5	2.1	4.7	4.4	9.1	.3	(NA)	(NA)
354	METALWORKING MACHINERY . . . . .	428	105	8.3	88.2	6.5	14.0	64.4	133.6	53.1	184.9	6.7	9.2	123.9
3541	MACHINE TOOLS, METAL CUTTING TYPES .	25	5	.9	8.9	.6	1.4	6.0	13.1	7.9	20.4	.9	1.1	14.1
3542	MACHINE TOOLS, METAL FORMING TYPES .	12	8	.5	5.1	.4	.8	3.4	9.5	5.9	15.5	.4	.4	6.5
3544	SPECIAL DIES, TOOLS, JIGS, FIXTURES	342	74	5.8	63.9	4.7	10.3	48.2	93.2	30.3	122.3	4.6	6.7	89.1
3545	MACHINE TOOL ACCESSORIES . . . . .	34	11	.7	5.8	.5	.9	3.8	10.2	4.5	14.7	.6	.8	10.2
3559	SPECIAL INDUSTRY MACHINERY, NEC. . . .	40	17	4.1	43.1	2.6	5.9	26.2	77.9	51.8	128.6	1.3	4.0	66.8
356	GENERAL INDUSTRIAL MACHINERY . . . . .	127	63	18.4	181.4	12.9	25.8	117.9	352.2	217.4	561.7	21.2	21.2	316.2
3561	PUMPS AND PUMPING EQUIPMENT. . . . .	14	9	2.3	19.7	1.2	2.3	9.5	42.3	39.3	80.7	3.8	(NA)	(NA)
3562	BALL AND ROLLER BEARINGS . . . . .	9	6	3.2	33.2	2.3	4.7	22.3	63.8	35.9	98.8	3.2	3.1	52.9
3564	BLOWERS AND FANS . . . . .	11	7	1.9	16.7	1.3	2.7	10.1	37.5	27.4	63.9	3.7	1.8	23.3
3569	GENERAL INDUSTRIAL MACHINERY, NEC. .	22	11	.8	8.7	.6	1.3	6.4	16.0	13.8	30.1	1.3	2.0	29.0
358	REFRIGERATION, SERVICE MACHINERY . .	50	22	5.8	44.3	3.9	7.4	28.8	98.6	101.0	197.6	4.2	6.7	79.5
359	MISC. MACHINERY, EXCEPT ELECTRICAL	402	63	7.0	69.2	5.8	11.4	53.2	113.8	60.2	171.8	4.7	(NA)	(NA)
36	ELECTRIC, ELECTRONIC EQUIPMENT . . . .	276	165	114.8	1 098.4	92.6	179.6	797.6	2 303.0	1 758.0	4 009.3	77.6	(NA)	(NA)
361	ELECTRIC DISTRIBUTING EQUIPMENT. . . .	13	7	5.3	47.4	3.9	7.7	31.9	94.3	63.8	157.4	1.7	(NA)	(NA)
362	ELECTRIC INDUSTRIAL APPARATUS. . . . .	54	34	13.6	118.7	10.7	20.9	85.2	207.7	132.2	331.6	5.2	14.4	166.5
3621	MOTORS AND GENERATORS. . . . .	22	16	10.1	93.0	8.1	16.0	68.6	154.2	94.7	243.5	4.0	10.4	124.8
3622	INDUSTRIAL CONTROLS. . . . .	13	5	.4	2.6	.3	.5	1.3	6.0	4.3	10.3	.2	EE	(D)
3634	ELECTRIC HOUSEWARES AND FANS . . . . .	6	5	.7	4.2	.6	1.1	2.9	10.0	10.1	20.0	.2	(NA)	(NA)
364	ELECT. LIGHTING AND WIRING EQUIP. . .	35	21	8.6	90.6	8.0	13.7	64.9	171.7	101.4	273.9	5.5	8.0	129.6
3643	CURRENT-CARRYING WIRING DEVICES. . .	17	10	1.6	10.4	1.4	2.7	7.0	21.0	14.4	35.2	1.3	1.8	20.4
366	COMMUNICATION EQUIPMENT. . . . .	26	12	15.1	158.0	10.0	19.0	86.7	260.6	160.9	421.6	19.6	FF	(D)
367	ELECTRONIC COMPONENTS AND ACCESS. .	67	43	15.9	116.4	13.5	25.9	89.2	205.7	184.9	387.2	11.0	20.8	205.7
369	MISC. ELECTRICAL EQUIP., SUPPLIES. . .	50	25	22.8	268.9	19.3	38.9	214.3	560.5	343.6	887.2	11.1	FF	(D)
3699	ELECTRICAL EQUIPMENT, SUPPLIES, NEC.	34	12	1.0	5.8	.8	1.5	3.6	11.1	11.5	22.3	.3	.9	7.0
37	TRANSPORTATION EQUIPMENT . . . . .	404	219	89.6	1 009.7	68.8	138.7	712.3	1 914.8	2 028.4	3 804.3	(D)	(NA)	(NA)
371	MOTOR VEHICLES AND EQUIPMENT . . . . .	168	101	56.4	632.9	46.5	94.9	498.7	1 162.1	1 370.3	2 507.1	(D)	58.0	889.1
3713	TRUCK AND BUS BODIES . . . . .	41	20	3.8	32.5	3.0	5.8	23.3	59.7	97.0	154.6	(D)	2.6	34.0
3714	MOTOR VEHICLE PARTS AND ACCESSORIES. .	106	69	48.8	564.2	40.5	83.6	450.1	1 027.2	1 007.1	2 012.1	61.9	FF	(D)
373	SHIP, BOAT BUILDING, REPAIRING . . . .	30	9	1.8	15.7	1.5	2.8	11.9	30.1	31.0	60.7	1.4	2.0	20.0
3743	RAILROAD EQUIPMENT . . . . .	7	6	1.7	17.2	1.3	2.5	13.0	38.3	48.9	85.1	1.3	(NA)	(NA)
379	MISC. TRANSPORTATION EQUIPMENT . . .	162	82	10.5	88.1	8.8	16.9	66.6	153.5	292.0	429.9	11.1	(NA)	(NA)

See footnotes at end of table.



TABLE 3. General Statistics for the State, by Industry Groups and Industries: 1972 and 1967—Continued

(See appendix, Explanation of Terms)

Code	Industry	1972										1967		
		Establishments		All employees		Production workers			Value added by manufacture	Cost of materials <sup>1</sup>	Value of shipments <sup>1</sup>	Capital expenditures, <sup>1967</sup>	All employees	Value added by manufacture
		Total	With 20 employees or more	Number	Payroll	Number	Man-hours	Wages						
		(number)	(number)	(1,000)	(million dollars)	(1,000)	(million)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(1,000)	(million dollars)
38	INSTRUMENTS AND RELATED PRODUCTS	116	47	8.8	72.8	6.2	12.1	43.3	193.6	104.8	293.8	6.8	(NA)	(NA)
3811	ENGINEERING, SCIENTIFIC INSTRUMENTS.	6	3	.4	3.8	.2	.5	1.7	5.5	3.7	9.7	.1	CC	(D)
382	MEASURING AND CONTROLLING DEVICES.	30	15	3.3	28.1	2.4	4.9	17.2	61.2	28.1	86.8	2.1	(NA)	(NA)
3829	MEASURING, CONTROLLING DEVICES, NEC.	12	5	.4	3.6	.2	.5	1.7	7.7	4.3	11.9	.2	(NA)	(NA)
384	MEDICAL INSTRUMENTS AND SUPPLIES .	42	15	2.8	22.0	1.9	3.6	12.9	63.5	34.4	96.0	2.8	1.0	21.2
3843	DENTAL EQUIPMENT AND SUPPLIES. . . .	8	3	.3	1.9	.2	.3	1.1	4.2	1.7	5.9	(D)	(NA)	(NA)
3861	PHOTOGRAPHIC EQUIPMENT AND SUPPLIES.	8	5	1.2	11.0	.9	1.6	6.1	44.5	31.3	75.4	1.0	1.2	46.5
39	MISC. MANUFACTURING INDUSTRIES .	263	64	10.8	86.6	8.3	15.5	53.7	193.6	155.3	350.3	(D)	10.5	132.9
391	JEWELRY, SILVERWARE, PLATED WARE .	22	4	.9	8.3	.6	1.3	4.9	16.2	10.3	27.1	.2	1.2	17.4
3931	MUSICAL INSTRUMENTS. . . . .	26	10	2.7	22.4	2.2	4.3	15.0	50.4	53.8	105.9	.9	3.0	45.1
394	TOYS AND SPORTING GOODS. . . . .	53	14	3.3	24.6	2.6	4.6	15.6	48.7	48.9	97.0	.6	1.5	13.3
3944	GAMES, TOYS, AND CHILDREN'S VEHICLES	10	4	.6	4.0	.5	.8	2.8	8.8	6.6	15.3	.3	(NA)	(NA)
395	PENS, PENCILS, OFFICE, ART GOODS .	16	6	.4	3.1	.3	.6	1.8	5.7	4.8	10.5	.1	8B	(D)
399	MISCELLANEOUS MANUFACTURES . . . .	139	30	3.4	28.1	2.5	4.7	16.2	72.2	37.2	109.2	3.8	4.3	52.3
3995	BURIAL CASKETS . . . . .	16	15	2.2	19.5	1.6	2.9	10.5	55.5	24.1	79.8	2.7	(NA)	(NA)
3999	MANUFACTURING INDUSTRIES, NEC. . . .	41	5	.3	1.7	.3	.5	1.2	3.6	3.3	6.8	(D)	.3	2.0
--	ADMINISTRATIVE AND AUXILIARY . .	149	76	15.2	181.3	-	-	-	-	-	-	-	8.9	-

Note: The following symbols indicate employment size range for 1967:

AA less than 250 employees      EE 1,000 to 2,499 employees  
BB 250 to 499 employees      FF 2,500 employees and over  
CC 500 to 999 employees

-- Represents zero. (NA) Not available. Because of a revision to this industry or industry group in the 1972 edition of the SIC manual, 1967 census data are not available on a comparable basis. (D) Withheld to avoid disclosing figures for individual companies. (Z) Less than half of the unit of measurement shown.

<sup>1</sup>The total cost of materials and value of shipments for industry groups shown may include extensive duplication arising from shipments between establishments in the same industry classification. (For a more complete explanation, see appendix.)

<sup>2</sup>Includes figures for industry groups which have been withheld from publication in order to (a) avoid disclosing figures for individual companies or (b) permit further checking of figures for smaller industry groups. Additional detail will appear in the final report for this State.

## Appendix A. SCOPE AND COVERAGE

This report is one of a series presenting preliminary information, by State, from the 1972 Census of Manufactures. The data will be superseded in a final report which, in turn, will be included in *Volume III, Area Statistics, 1972 Census of Manufactures*. The final report will include a comprehensive discussion of the concepts and definitions used in the census.

The census of manufactures covers each manufacturing establishment in the United States with one paid employee or more; manufacturing establishments with no employees are excluded. Firms which operated more than one establishment were required to file a separate report for each location. Companies which engaged in distinctly different lines of activity at one location were asked to submit separate reports if the company records permitted such a separation and the activities were of significant size.

This report includes figures for administrative offices, warehouses, garages, or other auxiliary units which service manufacturing establishments.

In the 1972 census, the approximately 120,000 manufacturing establishments with fewer than 10 employees were excused from filing reports. Under special arrangements which safeguarded the confidentiality of both tax and census records, data on payrolls, sales, and industry classification from the administrative records of the Social Security Administration and the Internal Revenue Service were made available to the Census Bureau for use in the 1972 Economic Censuses (retail and wholesale trade, service industries, construction industries, manufactures, and mineral industries). Estimates for data other than payrolls and sales for these small establishments were constructed from industry averages. The effect on industry aggregates is slight in most industries. For manufacturing as a whole, these small establishments account for less than 3 percent of the payrolls and value added.

Establishments are classified by industry in accordance with industry definitions described in the 1972 edition of the Standard Industrial Classification (SIC) Manual. For 1972, the SIC was significantly revised and the comparability with prior year's data for some industries was significantly affected. The comparability at the 2- and 3-digit SIC levels was less affected. The final volumes of the 1972 Census of Manufactures will contain a table relating aggregates based on the 1972 SIC with aggregates derived from classifying establishments according to the 1967 SIC definitions.

As in earlier censuses, a number of small establishments may have been misclassified as to industry. However, such possible misclassifications have significant effect on *none* of the statistics except the number of establishments. As indicated above, report forms were not mailed to very small establishments (fewer than 10 employees). The industry classifications for these establishments were assigned on the basis of brief descriptions of the general activity of the establishment. Where the description is incomplete or there are relatively fine lines of demarcation among industries or between manufacturing and nonmanufacturing activity, the code assigned to an establishment could differ from that which would have been assigned on the basis of more complete product information. Therefore, the total establishment count for individual industries should be viewed as an approximation rather than a precise measurement. The counts for establishments with 20 employees or more are more reliable than the total number of establishments.

More detailed figures for this State will appear in the final census reports. Final reports will also include a comprehensive discussion of such concepts as "industry" and "establishment," as well as the various statistical items such as "employment," "value of shipments," and "value added." Similar preliminary and final reports will be issued for other States during the coming months. A series of preliminary summary reports showing U.S. totals for each manufacturing industry and for each State are being issued. Final industry reports and final area reports will be published during 1974.

Order forms describing the individual reports and listing their prices may be obtained from any U.S. Department of Commerce district office or from the Publications Distribution Section, Social and Economic Statistics Administration, Washington, D.C. 20233.

The 1972 Census of Manufactures is the 29th census of manufacturing establishments in the United States. For 1972, it was conducted jointly with the censuses of mineral industries, construction industries, retail trade, wholesale trade, and selected services under authority of Title 13 of the United States Code. Title 13 specifies that a census of manufactures be conducted every 5 years and, as amended, to cover years ending in "2" and "7". Title 13 also authorizes an annual sample survey of manufacturing establishments in interim years.



## Appendix B. EXPLANATION OF TERMS

*(For a more complete discussion of these terms and the method of compiling the Census of Manufactures, see the "Introduction" to the 1967 Census of Manufactures, Volume III).*

**All Employees**—All full-time and part-time employees on the payrolls of operating manufacturing establishments for any part of the pay period ending nearest the 12th of the months specified on the report form. Included are all persons on paid sick leave, paid holidays, and paid vacations during these pay periods. Officers of corporations are included as employees; proprietors and partners of unincorporated firms are excluded. The "all employee" number is the average number of production workers for the midmonth payroll period of March, May, August, and November plus the number of nonproduction employees in mid-March.

**Number of Production Workers**—Workers (up through the working foreman level) engaged in fabricating, processing, assembling, inspecting, receiving, packing, warehousing, shipping (but not delivering), and maintenance, repair, janitorial, and watchman services, product development, auxiliary production for plant's own use (e.g., powerplant), recordkeeping, and other closely associated services. Proprietors and partners are excluded.

**Payroll**—This item includes all forms of compensation such as salaries, wages, commissions, dismissal pay, bonuses, vacation and sick leave pay, and compensation in kind, prior to such deductions as employees' Social Security contributions, withholding taxes, group insurance, union dues, and savings bonds. The total includes salaries of officers of these establishments, if a corporation; it excludes payments to the proprietor or partners, if an unincorporated concern. Respondents were told that in reporting they could follow the definition of payrolls used for calculating the Federal withholding tax.

**Man-Hours of Production Workers**—This total relates to production-worker man-hours worked or paid for at the plant including actual overtime hours (not straight-time equivalent hours). It excludes hours paid for vacation, holidays, or sick leave when the employee was not at the plant.

**Cost of Materials**—The term "Cost of Materials" refers to charges actually paid or payable for items consumed or put into production during the year, including freight and other direct charges incurred by the establishment in acquiring these materials. It includes the cost of materials or fuel consumed regardless of

whether these items were purchased by the establishment from other companies, transferred to it from other establishments of the same company, or withdrawn from inventory during the year. The establishment was requested to value materials transferred from other parts of the company at its approximate market value, not at cost of production. The important components of this cost item are (a) all raw materials, semifinished goods, parts, components, containers, scrap, and supplies put into production or used as operating supplies and for repair and maintenance during the year; (b) electric energy purchased; (c) fuels consumed for heat, power, or the generation of electricity; (d) work done by others on materials or parts furnished by manufacturing establishments (contract work); and (e) products bought and resold in the same condition.

**Value of Shipments**—The value of shipments is the received or receivable net selling value, f.o.b. plant (exclusive of freight and taxes), of all products shipped, both primary and secondary, as well as all miscellaneous receipts such as receipts for contract work performed for others, installation and repair, sales of scrap, and sale of products bought and resold without further processing. Included are all items made by the establishment or for it under contract from materials owned by it whether sold, transferred to other plants of the same company, or shipped on consignment. The net selling value of products made in one plant on a contract basis from materials owned by another was reported by the plant providing the materials.

In the case of multiunit companies, the manufacturer was requested to report the value of products transferred to other establishments of the same company at full economic value; i.e., to include not only the direct costs of production but also a reasonable proportion of "all other costs" (including company overhead) and profit.

**Duplication in Cost of Materials and Value of Products**—The aggregate cost of materials and value-of-shipments figures for industry groups and for all manufacturing industries may include large amounts of duplication since the products of some industries are used as materials by others. With some important exceptions, such as motor vehicles and parts, this duplication is not significant within individual industries but arises from the addition of the totals of related industries in successive stages of the production of a finished manufactured product. Examples are the addition of flour mills to bakeries in the food group and the addition of pulp mills to paper mills in the paper and allied products group of industries. Esti-



mates of this duplication indicate that the value of manufactured products exclusive of such duplication—the value of finished manufactures—approximates two-thirds of the total value of products.

Prior to 1962, the Bureau of the Census did not publish figures for cost of materials or value of shipments if they contained significant duplication. Effective with the 1962 annual survey these figures were shown at all industry levels for the United States to meet the requests for their use in studies in which the presence of an indeterminate amount of duplication is not a limiting factor. However, they are appropriately footnoted. Effective with the 1964 annual survey, these industry group totals are also shown at the State, standard metropolitan statistical area, and large-county level.

Even where there is no significant amount of duplication, value-of-shipments figures are deficient as measures of the relative economic importance of individual manufacturing industries or geographic areas because of the wide variation in ratio of materials, labor, and other processing costs to value of shipments among industries.

**Value Added by Manufacture**—This measure of manufacturing activity is derived by subtracting the cost of materials, supplies, containers, fuel, purchased electricity, and cost of resales contract work from the value of shipments for products manufactured plus resales and receipts for services rendered. The result of this calculation is adjusted by the net change in finished goods and work-in-process inventories between the beginning and end of the year. (In the few industries that report value of production rather than value of shipments, only changes in work-in-process inventories are used to adjust value added. In the shipbuilding and repairing industry, no inventory adjustment is made.)

“Value added” avoids the duplication in the value of shipments figure which results from the use of products of some establishments as materials by others. Value added is considered to be the best value measure available for comparing the relative economic importance of manufacturing among industries and geographic areas.

**Expenditures for Plant and Equipment**—Manufacturing establishments in operation and establishments under construction but not yet in operation, were asked to report their expenditures for (a) permanent additions and major alterations to the manufacturing establishment, and (b) new machinery and equipment used for replacement purposes and additions to plant capacity if they are of the type for which depreciation accounts are ordinarily maintained.

These totals exclude expenditures for new facilities and equipment leased from nonmanufacturing concerns; new facilities owned by the Federal Government but operated under contract by private companies; and plant and equipment furnished to the manufacturer by communities and nonprofit organizations. Expenditures for used plant and equipment (although reported in the census), expenditures for land, and cost of maintenance and repairs charged as current operating expense are also omitted from the figures for new capital expenditures.

**Central Administrative Offices and Auxiliary Units**—In the 1972 census as in previous years, respondents were asked to file separate reports for central administrative offices or auxiliary units which were (1) at different locations from the establishments served or, (2) at the same location as one of these establishments but were not operated as an integral part thereof and served two or more establishments. The functions of employees in central administrative offices include general company policy determination, planning and management (that is, company purchasing, accounting, general engineering, direction of company personnel matters, and legal and patent matters). Auxiliaries are storage facilities, garages, repair shops, purchasing offices, sales promotion offices, and research laboratories serving the plants or central management of the company.

**Standard Metropolitan Statistical Areas**—Standard metropolitan statistical areas (SMSA) are integrated economic and social units with a large volume of daily travel and communication between the central city and outlying parts of the area.<sup>1</sup> Each area (except in New England) consists of one whole county or more. An area may contain not only highly industrialized counties but also adjoining counties which, though primarily residential in character, contribute significantly to the industrial counties' labor force and are socially and economically integrated with the central city. These areas are defined by the Federal Committee on Standard Metropolitan Statistical Areas of the Office of Management and Budget for general-purpose use throughout the Federal Government in presenting economic and social data. In the New England States, similar intergration criteria are applied in defining

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<sup>1</sup> Each standard metropolitan statistical area must include either (1) a city with 50,000 or more inhabitants, or (2) a city having a population of at least 25,000 which (a) with the addition of the population of contiguous places has a population density of at least 1,000 persons per square mile; (b) constitutes, for general economic and social purposes, a single community with a combined population of at least 50,000; and (c) includes a total population of at least 75,000 in the county or counties in which the city and contiguous places are located.



SMSA's on a city and town basis because towns rather than counties are regarded as the significant unit in this region of the country.

The requirement that each SMSA consist of county units (except in New England) sometimes results in the inclusion in an area of considerable amount of territory which would not ordinarily be considered "metropolitan," much less "industrial." It is recognized that metropolitan areas could be more accurately defined in terms of smaller area segments such as minor civil

divisions, but the usefulness of areas so defined would be limited by the fact that many types of economic and social data are available only on a county basis.

Each SMSA is designated by the name of the principal city of the area. In addition to the name of the principal city, the area title may include one or two additional city names.

The data for SMSA's which changed definition since the 1967 census have not been retabulated on the new basis for years prior to 1972.

**U.S. DEPARTMENT OF COMMERCE**  
**Social and Economic Statistics Administration**  
BUREAU OF THE CENSUS  
Washington, D.C. 20233

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## PRELIMINARY REPORT

**1972 CENSUS OF  
MANUFACTURES**

## AREA SERIES

72(P)-S16

ed March 1974

U. S. DEPARTMENT OF COMMERCE • Social and Economic Statistics Administration • BUREAU OF THE CENSUS

**Iowa**

Value added by manufacturing in 1972 in the State of Iowa amounted to \$4,731 million, a 20-percent increase from 1971 and a 46-percent increase from 1967.

This report presents preliminary results from the 1972 Census of Manufactures for the State, its Standard Metropolitan Statistical Areas, and its counties.

Data are provided for industry groups within the State. Historical data, back to 1958, are included for the State as a whole,

and 1967 figures on employment and value added are provided for the smaller areas.

The figures in this report have been subjected to only preliminary review and must be regarded as approximations of the final census figures. No adjustments have been made in the value figures for changes in price level.

For an explanation of the terms used in the tables, see the appendix at the end of this report.

**TABLE 1. General Statistics for the State: 1972 and Earlier Years**

(See appendix, Explanation of Terms)

Year	Establishments		All employees <sup>1</sup>		Production workers			Value added by manufacture	Cost of materials <sup>2</sup>	Value of shipments <sup>2</sup>	Capital expenditures, new
	Total	With 20 employees or more	Number	Payroll	Number	Man-hours	Wages				
	(number)	(number)	(1,000)	(million dollars)	(1,000)	(millions)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(million dollars)
IOWA											
1972 Census .....	3,350	1,148	216.5	2,052.5	156.7	311.5	1,357.3	4,730.6	7,987.4	12,619.8	318.4
1971 ASM .....	(NA)	(NA)	200.8	1,729.3	143.2	279.8	1,122.3	3,941.1	6,317.0	10,229.3	262.6
1970 ASM .....	(NA)	(NA)	213.4	1,706.8	151.6	298.5	1,097.2	3,797.0	6,310.5	10,069.0	281.5
1969 ASM .....	(NA)	(NA)	218.8	1,669.3	158.9	313.3	1,086.9	3,729.9	6,079.3	9,759.5	267.4
1968 ASM .....	(NA)	(NA)	214.5	1,544.7	155.9	312.2	1,021.5	3,553.6	5,593.0	9,093.0	224.7
1967 Census .....	3,388	1,092	210.1	1,434.6	154.0	310.0	946.1	3,250.9	5,498.1	8,681.0	230.7
1966 ASM .....	(NA)	(NA)	205.6	1,375.1	150.1	308.6	911.4	3,030.6	5,296.3	8,231.8	221.8
1965 ASM .....	(NA)	(NA)	192.3	1,222.8	138.8	280.4	798.8	2,637.9	4,614.6	7,215.1	184.2
1964 ASM .....	(NA)	(NA)	182.2	1,131.4	130.4	267.1	739.7	2,484.4	4,267.7	6,705.2	172.2
1963 Census .....	3,496	982	178.2	1,046.7	126.9	256.4	687.0	2,287.0	(NA)	(NA)	127.0
1962 ASM .....	(NA)	(NA)	173.0	977.9	124.8	252.0	635.7	2,090.6	(NA)	(NA)	109.1
1961 ASM .....	(NA)	(NA)	171.3	931.0	124.0	249.6	607.1	1,891.8	(NA)	(NA)	124.7
1960 ASM .....	(NA)	(NA)	175.7	921.4	129.0	259.3	605.9	1,815.8	(NA)	(NA)	139.4
1959 ASM .....	(NA)	(NA)	179.6	924.3	133.9	269.7	621.1	1,948.0	(NA)	(NA)	111.2
1958 Census .....	3,596	945	166.1	812.5	120.7	241.0	537.7	1,684.3	(NA)	(NA)	103.2

Note: "ASM" data are based on a representative sample of manufacturing establishments canvassed in the Annual Survey of Manufactures. These estimates may differ from the results of a complete canvass of all manufacturing establishments. The standard errors associated with these estimates are published in the annual survey of manufactures volumes for this period. For comparative purposes, the 1972 ASM estimate for the State of Iowa was 220 thousand employees, and \$4,851 million in value added with corresponding standard error of estimate of 2 and 1.

(NA) Not available.

<sup>1</sup>Includes employment and payroll at central administrative offices and auxiliary units. (For a definition of these units, see appendix.)

<sup>2</sup>The total cost of materials and value of shipments may include extensive duplication arising from shipments between establishments in the same industry classification. (For a more complete explanation, see appendix.)

TABLE 2. General Statistics for the State, Standard Metropolitan Statistical Areas, and Counties: 1972 and 1967

(See appendix, Explanation of Terms)

State, standard metropolitan statistical areas, and counties <sup>1</sup>	1972											1967	
	Establishments		All employees <sup>2</sup>		Production workers			Value added by manufacture	Cost of materials <sup>3</sup>	Value of shipments <sup>3</sup>	Capital expenditures, new	All employees	Value added by manufacture
	Total	With 20 employees or more	Number	Payroll	Number	Man-hours	Wages	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(1,000)	(million dollars)
	(number)	(number)	(1,000)	(million dollars)	(1,000)	(million)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(1,000)	(million dollars)
IOWA, TOTAL . . . . .	3 330	1 148	216.5	2 052.5	156.7	311.7	1 337.3	4 750.6	7 987.4	12 619.8	318.1	210.1	3 250.9
STANDARD METROPOLITAN STATISTICAL AREAS <sup>4</sup>													
CEDAR RAPIDS . . . . .	196	73	22.5	228.1	14.3	29.3	130.0	473.4	747.9	1 210.0	22.7	28.3	421.8
DAVENPORT-ROCK ISLAND-MOLINE . . . . .	418	169	41.7	461.5	29.6	57.1	298.4	849.7	1 258.3	2 045.7	33.2	49.4	770.0
PORTION IN ILLINOIS . . . . .	253	104	26.8	297.1	18.8	35.3	184.8	552.8	711.4	1 204.5	12.9	33.0	517.4
PORTION IN IOWA . . . . .	160	65	14.9	164.4	10.8	21.8	113.6	296.9	543.9	839.2	20.3	16.3	252.4
DES MOINES . . . . .	434	143	27.2	273.3	17.7	34.0	161.5	542.3	833.8	1 358.8	23.8	25.6	394.3
DUBUQUE . . . . .	108	41	14.9	165.4	11.1	22.0	118.2	346.8	529.0	860.9	10.3	12.3	204.5
OMAHA . . . . .	607	249	28.6	344.8	28.4	55.9	227.5	852.8	1 959.0	2 779.6	41.9	36.6	603.8
PORTION IN IOWA . . . . .	73	26	3.7	26.9	3.1	6.2	19.5	79.0	224.7	301.1	4.4	2.0	25.1
PORTION IN NEBRASKA . . . . .	534	223	24.9	317.9	25.3	49.7	207.7	773.8	1 734.3	2 478.5	37.5	34.6	580.7
SIOUX CITY . . . . .	154	63	10.6	87.9	7.7	15.9	57.4	196.8	1 065.8	1 261.5	11.0	9.2	117.2
WATERLOO-CEDAR FALLS . . . . .	119	55	19.2	207.1	14.7	28.6	154.3	433.5	439.6	867.8	39.6	21.0	311.6
COUNTIES													
ALLAMAKEE . . . . .	24	5	.9	5.9	.8	1.6	4.5	15.5	56.2	70.3	.4	.5	5.5
APPANOOSE . . . . .	24	10	1.1	6.2	.9	1.9	4.8	19.8	15.5	35.0	.7	1.0	13.9
BENTON . . . . .	23	5	.4	3.2	.3	.6	2.2	5.6	12.3	17.7	.3	.4	4.1
BLACK HAWK . . . . .	149	59	19.2	207.1	14.7	28.6	154.3	433.5	439.6	867.8	39.6	21.0	311.6
BOONE . . . . .	30	10	.8	5.2	.6	1.0	3.4	10.6	8.9	19.7	.7	.6	5.3
CARROLL . . . . .	24	6	.3	2.2	.2	.5	1.3	5.1	7.2	12.2	1.4	.5	2.8
CEDAR . . . . .	23	3	.3	2.0	.2	.4	1.5	5.5	8.3	13.7	.2	.2	4.0
CERRO GORDO . . . . .	62	30	3.8	36.2	3.0	5.8	26.5	77.0	276.0	350.2	4.3	3.4	51.8
CHICKASAW . . . . .	14	8	.8	6.3	.6	1.3	4.0	19.8	61.9	81.3	(0)	.3	4.7
CLAY . . . . .	34	10	.9	7.0	.7	1.4	4.9	18.5	118.7	135.0	.4	(0)	(0)
CLAYTON . . . . .	31	6	.4	2.3	.3	.7	1.7	4.4	15.8	20.1	.3	.6	6.4
CLINTON . . . . .	58	27	6.6	63.4	5.1	10.5	45.6	171.8	209.1	380.7	22.7	6.1	108.9
DELAWARE . . . . .	21	3	.5	3.6	.4	.9	2.5	7.6	25.4	32.8	2.0	.3	2.4
DES MOINES . . . . .	64	33	9.2	78.4	6.8	12.5	51.4	185.4	153.8	338.1	9.8	11.1	189.1
DICKINSON . . . . .	17	4	1.0	6.0	.8	1.6	3.6	16.3	9.8	25.5	1.9	.8	7.1
DUBUQUE . . . . .	104	41	14.9	165.4	11.1	22.0	118.2	346.8	529.0	860.9	10.3	12.3	204.5
EMMET . . . . .	19	7	1.4	11.7	1.1	2.3	8.9	26.3	116.2	141.1	1.1	(0)	(0)
FAYETTE . . . . .	37	9	.7	6.3	.5	1.2	4.5	14.7	28.3	43.0	.5	.9	10.4
FRANKLIN . . . . .	15	4	.4	3.0	.3	.7	2.3	6.6	9.1	15.7	.2	.3	4.7
FREMONT . . . . .	11	4	.3	2.1	.2	.4	1.4	5.9	4.2	8.9	(0)	(0)	(0)
GREENE . . . . .	16	7	.8	6.3	.5	.9	3.3	5.2	6.0	11.0	.6	.5	3.8
GRUNDY . . . . .	26	8	.7	4.6	.5	1.1	3.0	10.6	12.4	22.7	.4	.3	4.6
HAMILTON . . . . .	39	10	2.3	19.5	1.7	3.2	12.5	45.5	62.2	107.9	2.5	1.1	11.6
HARDIN . . . . .	32	8	.7	5.4	.5	1.0	3.8	12.5	90.2	102.4	.6	.8	13.7
HENRY . . . . .	17	6	.7	4.2	.5	1.2	3.3	13.7	12.2	25.9	.4	.5	6.1
HUMBOLDT . . . . .	20	6	.3	2.3	.2	.4	1.3	4.7	4.9	9.6	.2	.4	3.8
IOWA . . . . .	20	7	2.0	16.6	1.5	2.9	9.7	29.7	50.5	77.6	1.6	(0)	(0)
JACKSON . . . . .	26	3	.7	4.5	.6	1.0	3.6	9.8	15.5	24.9	.2	.9	7.5
JASPER . . . . .	33	14	4.8	46.5	3.2	6.1	29.0	162.6	91.9	255.4	4.9	4.6	101.1
JEFFERSON . . . . .	14	10	1.3	9.5	1.0	1.8	6.3	18.8	20.7	38.9	.5	1.8	19.8
JOHNSON . . . . .	40	14	2.1	18.1	1.6	3.2	11.8	138.8	81.5	220.6	5.4	2.2	102.5
JONES . . . . .	37	10	.7	4.9	.5	1.0	3.1	8.8	14.2	22.7	1.0	.5	4.8
KOSSUTH . . . . .	14	6	.6	4.1	.5	1.0	3.0	12.6	14.4	27.3	.8	.5	3.8
LEE . . . . .	64	26	6.3	53.6	4.7	9.4	36.5	132.2	169.0	299.6	10.2	6.6	99.0
LINN . . . . .	194	73	22.5	228.1	14.3	29.3	130.0	473.4	747.9	1 210.0	22.7	28.3	421.8
LUCAS . . . . .	13	3	.4	2.4	.3	.6	1.9	4.8	2.8	7.5	.4	.4	2.3
MAHASKA . . . . .	30	11	1.4	9.1	1.0	2.0	5.8	22.9	30.6	53.3	1.8	1.1	11.6
MARION . . . . .	24	7	1.8	14.4	1.6	3.1	11.1	24.3	26.9	50.5	2.4	1.4	15.4
MARSHALL . . . . .	55	25	5.8	61.8	3.6	6.8	33.8	118.6	107.9	224.5	2.4	6.1	85.7
MONROE . . . . .	13	4	.4	2.4	.3	.7	1.7	4.5	4.4	9.1	1.0	.2	1.2
MONTGOMERY . . . . .	13	4	.8	5.7	.6	1.2	4.0	22.4	8.5	30.9	.7	(0)	(0)
MUSCATINE . . . . .	71	35	5.7	52.4	3.9	7.8	29.4	222.8	176.7	395.8	11.1	4.4	84.4
O'BRIEN . . . . .	19	4	.4	2.8	.2	.5	1.6	7.7	72.7	79.8	.2	(0)	(0)
OSCEOLA . . . . .	10	6	.4	2.3	.3	.6	1.7	4.7	23.0	27.6	3.8	(0)	(0)
PAGE . . . . .	23	8	.7	5.3	.5	1.0	3.1	14.6	15.8	30.1	.6	.5	6.0
PLYMOUTH . . . . .	20	8	1.0	8.0	.5	1.0	3.4	15.8	83.6	99.4	1.0	.6	5.5
POCAHONTAS . . . . .	18	3	.4	3.4	.3	.6	2.5	6.2	4.7	10.8	.3	.3	3.3
POLK . . . . .	408	140	26.8	270.8	17.4	33.4	159.4	537.7	826.7	1 347.7	23.5	21.1	341.8
POTTAWATTAMIE . . . . .	73	26	3.7	26.9	3.1	6.2	19.8	79.0	224.7	301.1	4.4	2.0	75.1
POWESHIEK . . . . .	27	10	1.2	8.7	.9	1.8	6.2	23.4	13.8	43.1	1.0	.4	6.3
SAC . . . . .	19	5	.4	2.9	.3	.6	1.7	5.8	6.2	12.4	.2	.5	5.9
SCOTT . . . . .	160	65	14.9	164.4	10.8	21.8	113.6	296.9	543.9	839.2	20.3	16.3	252.4
SIOUX . . . . .	49	17	1.5	10.4	1.1	2.4	7.0	25.0	70.6	95.1	1.6	1.1	8.7
STORY . . . . .	48	13	1.6	13.1	1.1	2.0	6.9	39.2	17.3	52.2	4.6	2.1	25.9
TAYLOR . . . . .	6	3	.3	1.6	.2	.5	1.2	3.7	4.6	8.0	.3	.2	2.9
UNION . . . . .	13	4	.6	4.3	.4	.9	2.8	11.4	7.3	18.6	.5	.6	7.7
WAPELLO . . . . .	34	16	5.0	56.3	3.7	7.8	40.8	86.8	233.3	327.9	3.6	5.3	80.0
WARREN . . . . .	26	3	.4	3.0	.3	.6	2.1	4.6	7.1	11.1	.3	.3	3.5
WASHINGTON . . . . .	29	8	.9	7.6	.7	1.4	4.6	16.8	32.1	47.6	1.1	.5	4.4
WEBSTER . . . . .	59	25	3.8	35.3	2.9	5.9	26.3	82.3	227.7	307.8	6.4	4.5	77.4
WINNEBIEK . . . . .	19	7	.4	2.7	.3	.5	1.5	7.0	10.6	17.2	.3	.4	3.5
WRIGHT . . . . .	26	3	.6	4.7	.4	.8	2.7	16.4	95.2	111.1	1.1	.7	10.7

(0) Withheld to avoid disclosing figures for individual companies.

<sup>1</sup>Some counties were withheld from publication in order to (a) avoid disclosing figures for individual companies or (b) permit further checking of the figures for smaller counties. Additional detail will appear in the final report for this State.<sup>2</sup>Includes employment and payroll at central administrative offices and auxiliary units. (For a definition of these units, see appendix.)<sup>3</sup>The total cost of materials and value of shipments may include extensive duplication arising from shipments between establishments in the same industry classification. (For a more complete explanation, see appendix.)<sup>4</sup>The standard metropolitan statistical areas in this State are defined as follows:

CEDAR RAPIDS SMSA: Coextensive with Linn County, IA.

DAVENPORT-ROCK ISLAND-MOLINE, IA-IL, SMSA: Consists of Scott County, IA, and Henry and Rock Island Counties, IL.

DES MOINES SMSA: Consists of Polk and Warren Counties, IA.

DUBUQUE SMSA: Coextensive with Dubuque County, IA.

OMAHA, NE-IA, SMSA: Consists of Douglas and Sarpy Counties, NE, and Pottawattamie County, IA.

SIOUX CITY, IA-NE, SMSA: Consists of Woodbury County, IA, and Dakota County, NE.

WATERLOO-CEDAR FALLS SMSA: Coextensive with Black Hawk County, IA.



TABLE 3. General Statistics for the State, by Industry Groups and Industries: 1972 and 1967

(See appendix, Explanation of Terms)

Code	Industry	1972											1967	
		Establishments		All employees		Production workers			Value added by manufacture	Cost of materials <sup>1</sup>	Value of shipments <sup>1</sup>	Capital expenditures, new	All employees	Value added by manufacture
		Total	With 20 employees or more	Number	Payroll	Number	Man-hours	Wages						
		(number)	(number)	(1,000)	(million dollars)	(1,000)	(million)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(1,000)	(million dollars)
	ALL INDUSTRIES, TOTAL <sup>2</sup> . . . . .	3 350	1 142	216.5	2 052.5	156.7	311.5	1 357.3	4 730.6	7 987.4	12 619.8	318.4	210.1	3 100.9
20	FOOD AND KINDRED PRODUCTS. . . . .	616	270	50.3	484.3	36.6	73.0	338.7	1 122.4	4 793.6	5 893.5	84.6	49.2	816.8
201	MEAT PRODUCTS. . . . .	173	66	27.5	277.5	22.6	44.0	223.3	488.3	3 277.1	3 754.7	21.8	25.3	338.8
2011	MEATPACKING PLANTS . . . . .	77	44	24.1	258.1	19.6	37.8	207.5	433.3	3 139.7	3 564.7	18.4	22.6	317.8
2013	SAUSAGES AND OTHER PREPARED MEATS . . . . .	24	7	1.2	7.7	1.1	2.4	6.1	26.0	55.2	81.2	1.2	CC	(D)
2016	POULTRY DRESSING PLANTS. . . . .	15	4	.8	4.3	.7	1.4	3.5	8.5	29.7	37.8	.9	(NA)	(NA)
2017	POULTRY AND EGG PROCESSING . . . . .	7	7	1.4	7.3	1.3	2.4	6.2	20.5	52.5	71.1	1.3	(NA)	(NA)
202	DAIRY PRODUCTS . . . . .	131	52	4.6	36.8	2.5	5.1	19.1	122.0	429.6	549.2	6.4	5.6	104.7
2021	CREAMERY BUTTER. . . . .	22	5	.3	2.2	.2	.3	1.6	6.0	40.8	46.7	.2	1.2	11.5
2022	CHEESE, NATURAL AND PROCESSED. . . . .	22	10	.6	3.9	.5	1.1	3.1	17.9	72.1	89.6	.8	.6	5.6
2023	CONDENSED AND EVAPORATED MILK . . . . .	18	12	.9	8.1	.8	1.5	6.8	49.8	126.2	174.3	2.0	CC	(D)
2026	FLUID MILK . . . . .	59	21	2.6	22.9	.8	1.8	6.8	44.1	183.3	227.2	3.3	2.9	35.4
204	GRAIN MILL PRODUCTS. . . . .	172	71	9.6	99.9	6.0	12.9	58.9	323.6	564.7	884.4	24.6	9.5	247.9
205	BAKERY PRODUCTS. . . . .	51	22	3.1	23.9	1.8	3.3	11.9	47.2	40.8	87.9	1.5	3.4	39.6
2051	BREAD, CAKE, AND RELATED PRODUCTS. . . . .	40	19	2.4	20.3	1.2	2.4	9.1	40.6	31.0	71.6	1.1	2.8	34.3
2052	COOKIES AND CRACKERS . . . . .	3	3	.7	3.7	.6	1.0	2.8	6.6	9.8	16.3	.4	.6	5.2
207	FATS AND OILS. . . . .	37	16	1.4	13.3	1.1	2.3	9.6	50.3	378.8	422.9	6.5	(NA)	(NA)
2075	SOYBEAN OIL MILLS. . . . .	16	11	.8	7.5	.5	1.1	5.0	39.1	358.0	392.0	4.6	.9	21.9
2077	ANIMAL AND MARINE FATS AND OILS. . . . .	21	5	.6	5.7	.5	1.2	4.6	11.2	20.8	30.8	1.9	.6	7.8
208	BEVERAGES. . . . .	43	20	1.7	13.4	.7	1.4	3.9	34.7	37.5	72.4	5.2	1.6	22.3
2086	BOTTLED AND CANNED SOFT DRINKS . . . . .	30	27	1.7	12.9	.6	1.3	3.5	32.0	33.2	65.3	(D)	1.5	21.0
209	MISC. FOODS AND KINDRED PRODUCTS . . . . .	32	4	.7	5.6	.5	.9	2.9	26.5	19.1	46.3	1.3	(NA)	(NA)
2099	FOOD PREPARATIONS, NEC . . . . .	22	7	.6	5.0	.4	.7	2.5	24.9	18.2	43.8	1.2	.6	10.2
22	TEXTILE MILL PRODUCTS. . . . .	9	5	.3	1.6	.2	.5	1.0	2.6	3.0	5.5	.1	.3	1.5
23	APPAREL, OTHER TEXTILE PRODUCTS. . . . .	65	24	3.5	17.0	3.1	5.7	13.5	34.5	26.7	60.2	1.0	FF	(D)
232	MEN'S AND BOYS' FURNISHINGS. . . . .	13	4	1.2	5.5	1.1	2.0	4.6	10.4	7.8	18.2	.2	EE	(D)
2329	MEN'S AND BOYS' CLOTHING, NEC. . . . .	3	3	.6	2.9	.5	.9	2.6	5.3	2.8	8.2	.2	.4	3.0
234	WOMEN'S, CHILDREN'S UNDERGARMENTS. . . . .	5	5	.6	2.6	.5	1.0	2.3	6.9	5.6	12.5	.1	.5	5.4
2341	WOMEN'S AND CHILDREN'S UNDERWEAR . . . . .	5	5	.6	2.6	.5	1.0	2.3	6.9	5.6	12.5	.1	.5	5.4
239	MISC. FABRICATED TEXTILE PRODUCTS. . . . .	29	4	.4	2.5	.3	.6	1.6	5.3	4.6	9.8	.1	1.3	10.6
24	LUMBER AND WOOD PRODUCTS . . . . .	174	30	4.6	33.6	3.8	7.5	25.9	65.6	97.5	163.6	4.5	(NA)	(NA)
2421	SAWMILLS AND PLANING MILLS, GENERAL. . . . .	57	2	.3	2.4	.3	.6	2.2	4.7	5.7	10.5	(D)	BB	(D)
243	MILLWORK, PLYWOOD, STRUC. MEMBERS. . . . .	41	14	2.7	20.9	2.3	4.4	16.1	34.9	43.6	79.3	3.0	(NA)	(NA)
2431	MILLWORK . . . . .	16	8	2.3	18.6	2.0	3.8	14.5	29.3	37.3	67.4	2.7	(NA)	(NA)
244	WOOD CONTAINERS. . . . .	8	2	.3	1.3	.3	.6	1.2	3.3	5.4	8.6	(2)	(NA)	(NA)
245	WOOD BUILDINGS AND MOBILE HOMES. . . . .	11	9	.8	6.5	.6	1.3	4.6	17.6	37.7	55.0	.7	(NA)	(NA)
25	FURNITURE AND FIXTURES . . . . .	62	28	4.1	35.2	3.1	6.0	21.3	71.4	53.5	122.1	3.1	3.0	38.3
251	HOUSEHOLD FURNITURE. . . . .	29	10	2.2	17.8	1.7	3.2	11.3	32.7	28.0	59.5	1.7	(NA)	(NA)
2511	WOOD HOUSEHOLD FURNITURE . . . . .	11	5	.6	4.4	.5	.9	3.3	8.5	5.7	13.6	.6	(NA)	(NA)
2512	UPHOLSTERED HOUSEHOLD FURNITURE. . . . .	9	4	1.3	11.3	1.0	1.8	6.6	18.5	16.1	34.2	1.0	(NA)	(NA)
26	PAPER AND ALLIED PRODUCTS. . . . .	45	33	4.3	37.3	3.5	7.2	27.0	90.1	106.2	195.7	8.6	4.1	61.0
264	MISC. CONVERTED PAPER PRODUCTS . . . . .	19	12	1.7	13.3	1.4	2.7	9.3	40.1	29.2	69.2	5.1	1.7	26.4
2641	PAPER COATING AND GLAZING. . . . .	5	4	.5	4.3	.4	.9	3.1	13.7	12.4	25.7	.6	BB	(D)
2643	BAGS, EXCEPT TEXTILE BAGS. . . . .	7	5	1.1	7.7	.9	1.6	5.3	23.5	14.5	38.3	4.3	.9	15.6
265	PAPEBOARD CONTAINERS AND BOXES. . . . .	21	17	2.3	20.1	1.8	3.7	14.7	40.9	67.4	107.9	3.2	2.0	26.5
27	PRINTING AND PUBLISHING. . . . .	668	116	13.4	111.0	7.5	13.9	57.7	197.9	165.2	363.0	14.5	12.5	173.4
2711	NEWSPAPERS . . . . .	295	46	5.5	41.0	2.7	4.7	19.8	87.1	21.1	108.2	9.0	5.8	63.8
273	BOOKS. . . . .	20	5	1.8	18.5	1.4	2.8	14.0	37.1	24.4	61.4	1.8	.4	6.2
275	COMMERCIAL PRINTING. . . . .	260	39	2.8	23.5	2.1	3.9	14.6	41.0	25.4	66.1	1.7	(NA)	(NA)
2751	COMMERCIAL PRINTING, LETTERPRESS . . . . .	157	11	1.2	9.2	.9	1.8	6.2	17.4	11.2	28.5	.8	(NA)	(NA)
2761	MANIFOLD BUSINESS FORMS. . . . .	9	7	.5	4.5	.4	.9	3.1	12.8	9.5	22.1	.9	.4	7.9
28	CHEMICALS AND ALLIED PRODUCTS. . . . .	109	34	5.4	55.4	3.3	6.7	28.3	408.1	284.0	688.1	24.7	5.3	243.6
283	DRUGS. . . . .	10	5	1.0	9.9	.5	1.0	3.8	27.4	17.1	42.6	1.7	.8	19.4
284	SOAPS, CLEANERS, AND TOILET GOODS. . . . .	24	5	1.4	15.2	.8	1.7	7.7	142.5	65.0	207.0	3.9	(NA)	(NA)
2851	PLANTS AND ALLIED PRODUCTS . . . . .	15	5	.6	5.3	.4	.7	3.1	26.6	26.2	52.7	.6	.5	24.1
287	AGRICULTURAL CHEMICALS . . . . .	20	12	1.3	13.8	.8	1.8	6.9	59.7	95.7	154.6	4.7	(NA)	(NA)
2873	NITROGENOUS FERTILIZERS. . . . .	4	3	.4	4.7	.3	.6	2.5	18.9	37.0	55.9	.9	(NA)	(NA)
2875	FERTILIZERS, MIXING ONLY . . . . .	12	4	.4	3.2	.3	.6	2.0	9.3	18.7	26.7	(D)	.4	5.9
29	PETROLEUM AND COAL PRODUCTS. . . . .	13	5	.3	2.9	.2	.5	1.9	7.2	6.5	13.4	1.1	.2	1.7
30	RUBBER AND MISC. PLASTICS PROD . . . . .	60	59	10.0	90.6	8.0	15.8	76.4	250.7	168.1	433.6	18.6	(NA)	(NA)
3079	MISCELLANEOUS PLASTICS PRODUCTS. . . . .	56	31	4.4	36.9	3.5	6.8	25.7	84.0	62.8	145.6	8.9	(NA)	(NA)
31	LEATHER AND LEATHER PRODUCTS . . . . .	10	10	.9	4.8	.7	1.3	3.2	9.0	15.0	25.9	.2	CC	(D)
3151	LEATHER GLOVES AND MITTENS . . . . .	4	3	.3	1.4	.2	.4	.9	3.7	6.8	12.4	(D)	AA	(D)
32	STONE, CLAY, AND GLASS PRODUCTS. . . . .	314	50	5.6	49.6	4.4	9.2	36.3	127.0	100.3	227.5	12.4	6.2	110.7
3241	CEMENT, HYDRAULIC. . . . .	5	5	.9	10.4	.8	1.7	8.7	32.1	18.2	50.3	(D)	1.1	30.6

See footnotes at end of table.

TABLE 3. General Statistics for the State, by Industry Groups and Industries: 1972 and 1967—Continued

(See appendix, Explanation of Terms)

Code	Industry	1972										1967		
		Establishments		All employees		Production workers			Value added by manufacture	Cost of materials <sup>1</sup>	Value of shipments <sup>1</sup>	Capital expenditures, new	All employees	Value added by manufacture
		Total	With 20 employees or more	Number	Payroll	Number	Man-hours	Wages						
		(number)	(number)	(1,000)	(million dollars)	(1,000)	(million)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(1,000)	(million dollars)
325	STRUCTURAL CLAY PRODUCTS . . . . .	15	12	0.8	6.0	0.7	1.4	4.6	10.7	6.6	17.7	1.1	1.0	9.8
327	CONCRETE, GYPSUM, PLASTER PRODUCTS . . . . .	273	46	3.7	31.6	2.7	5.8	21.7	77.7	70.8	148.1	9.8	3.8	65.7
3271	CONCRETE BLOCK AND BRICK . . . . .	25	5	.3	2.4	.1	.3	1.0	4.3	4.5	8.8	.4	BB	(D)
3272	CONCRETE PRODUCTS, NEC . . . . .	83	14	1.0	7.6	.8	1.6	5.4	15.5	8.7	24.1	.7	EE	(D)
3273	READY-MIXED CONCRETE . . . . .	161	21	1.5	12.7	1.1	2.2	8.3	30.2	38.1	68.2	7.5	EE	(D)
33	PRIMARY METAL INDUSTRIES . . . . .	64	41	8.1	84.0	6.5	13.5	62.6	134.9	242.5	368.5	12.4	8.6	120.4
332	IRON AND STEEL FOUNDRIES . . . . .	24	21	2.8	26.7	2.4	4.7	20.9	46.2	33.0	79.0	3.1	2.7	30.7
3321	GRAY IRON FOUNDRIES . . . . .	14	15	1.7	14.5	1.4	2.4	10.8	28.7	23.5	52.1	1.6	1.6	18.3
336	NONFERROUS FOUNDRIES . . . . .	25	17	1.3	9.7	1.0	2.0	6.8	13.3	12.0	25.3	1.3	1.2	11.5
3361	ALUMINUM FOUNDRIES . . . . .	17	7	.7	5.2	.6	1.0	4.2	6.5	6.7	13.0	.7	.6	5.8
34	FABRICATED METAL PRODUCTS . . . . .	240	103	18.7	160.9	13.6	26.3	102.0	307.4	255.3	561.0	16.5	(NA)	(NA)
342	CUTLERY, HANDTOOLS AND HARDWARE . . . . .	21	5	1.1	9.3	.9	1.7	6.5	19.7	20.7	39.4	.7	.7	9.3
3429	HARDWARE, NEC . . . . .	~	5	.8	6.5	.6	1.1	4.2	13.5	17.4	30.2	.6	.5	6.7
344	FABRICATED STRUCTURAL METAL PROD . . . . .	162	47	5.8	46.8	4.4	9.3	32.7	92.1	96.9	189.9	4.4	4.7	44.2
3441	FABRICATED STRUCTURAL METAL PRODUCTS . . . . .	28	16	1.9	16.2	1.3	2.7	10.5	23.8	38.3	64.6	1.6	1.8	15.9
3442	METAL DOORS, SASH, AND TRIM . . . . .	10	9	.8	4.8	.6	1.3	3.4	9.7	10.1	19.8	.6	.4	3.8
3443	FABRICATED PLATEWORK (BOILERS SHOP) . . . . .	17	10	1.2	10.0	1.0	2.0	7.2	26.0	23.3	48.6	1.2	.6	4.6
3444	SHEET METALWORK . . . . .	27	5	1.6	13.0	1.2	2.8	9.6	27.9	21.0	48.1	.8	1.3	12.5
346	METAL FORGINGS AND STAMPINGS . . . . .	19	3	1.0	6.4	.8	1.6	5.1	16.7	9.5	26.2	.6	(NA)	(NA)
3469	METAL STAMPINGS, NEC . . . . .	13	7	.7	4.9	.6	1.2	3.8	11.9	6.9	18.7	.4	(NA)	(NA)
349	MISC. FABRICATED METAL PRODUCTS . . . . .	45	20	5.4	53.3	3.5	6.5	28.5	108.8	63.5	172.2	4.4	(NA)	(NA)
3494	VALVES AND PIPE FITTINGS . . . . .	8	5	3.7	37.0	2.3	4.1	20.2	77.6	37.2	113.0	3.2	3.2	50.1
3499	FABRICATED METAL PRODUCTS, NEC . . . . .	24	8	1.3	12.6	.8	1.7	5.6	23.8	18.7	44.4	.7	(NA)	(NA)
35	MACHINERY, EXCEPT ELECTRICAL . . . . .	472	175	47.3	522.5	35.4	71.4	369.3	1 162.4	934.8	2 090.0	62.0	46.4	753.1
352	FARM AND GARDEN MACHINERY . . . . .	135	71	22.3	254.6	17.3	34.4	185.7	564.5	437.9	997.2	44.1	(NA)	(NA)
353	CONSTRUCTION AND RELATED MACHINERY . . . . .	52	29	14.6	172.9	10.6	22.4	121.6	395.2	369.9	745.1	10.3	12.3	226.9
354	METALWORKING MACHINERY . . . . .	62	21	2.3	22.2	1.7	3.4	14.4	40.0	25.5	64.5	1.4	2.1	31.8
3544	SPECIAL DIES, TOOLS, JIGS, FIXTURES . . . . .	37	7	.7	7.1	.6	1.3	5.7	10.7	4.3	14.9	.6	.8	11.5
3549	METALWORKING MACHINERY, NEC . . . . .	17	5	.7	6.1	.5	.9	3.3	13.3	9.9	22.8	(D)	(NA)	(NA)
355	SPECIAL INDUSTRY MACHINERY . . . . .	38	15	2.1	21.0	1.4	3.0	12.7	50.7	28.8	79.5	1.0	2.1	32.8
3551	FOOD PRODUCTS MACHINERY . . . . .	11	3	1.0	10.8	.6	1.3	5.8	25.5	12.1	38.1	.5	1.2	17.9
358	REFRIGERATION, SERVICE MACHINERY . . . . .	24	10	1.8	16.2	1.2	2.2	10.0	32.4	30.7	62.9	2.1	1.5	23.0
359	MISC. MACHINERY, EXCEPT ELECTRICAL . . . . .	122	12	1.5	12.2	1.2	2.4	9.1	23.6	15.2	38.6	1.2	(NA)	(NA)
36	ELECTRIC, ELECTRONIC EQUIPMENT . . . . .	62	36	20.0	174.6	14.6	28.5	111.0	405.8	354.0	753.8	10.9	(NA)	(NA)
362	ELECTRICAL INDUSTRIAL APPARATUS . . . . .	6	4	.6	4.1	.4	.8	2.7	9.6	6.2	15.4	.7	AA	(D)
363	HOUSEHOLD APPLIANCES . . . . .	11	9	6.2	54.2	4.9	9.2	39.9	187.8	155.9	342.8	6.4	FF	(D)
367	ELECTRONIC COMPONENTS AND ACCESS . . . . .	14	10	3.5	22.8	3.0	5.7	17.3	45.7	35.1	80.0	.6	4.4	49.1
37	TRANSPORTATION EQUIPMENT . . . . .	93	41	7.7	62.9	5.7	12.1	40.8	177.1	254.2	412.0	36.0	(NA)	(NA)
371	MOTOR VEHICLES AND EQUIPMENT . . . . .	57	28	6.3	50.4	4.8	10.4	34.7	145.8	238.1	369.2	32.3	2.6	34.2
3713	TRUCK AND BUS BODIES . . . . .	21	13	4.1	33.5	3.0	6.7	22.1	96.9	177.7	262.2	23.6	CC	(D)
379	MISC. TRANSPORTATION EQUIPMENT . . . . .	21	9	.7	4.2	.6	1.0	2.9	7.4	10.7	18.1	(D)	(NA)	(NA)
38	INSTRUMENTS AND RELATED PRODUCTS . . . . .	44	11	2.5	25.3	1.6	3.1	12.7	49.0	23.9	72.6	2.8	(NA)	(NA)
3811	ENGINEERING, SCIENTIFIC INSTRUMENTS . . . . .	5	3	1.0	9.5	.5	1.0	3.9	16.6	7.1	23.3	1.1	EE	(D)
39	MISC. MANUFACTURING INDUSTRIES . . . . .	141	41	6.2	43.8	4.6	9.1	26.6	107.7	63.3	169.6	3.8	5.6	64.8
394	TOYS AND SPORTING GOODS . . . . .	41	13	2.3	15.2	1.8	3.5	9.5	42.1	23.1	65.4	.1	1.8	21.0
395	PENS, PENCILS, OFFICE, ART GOODS . . . . .	7	3	1.3	10.7	.9	1.8	5.9	20.9	12.0	32.5	.3	EE	(D)
396	COSTUME JEWELRY AND NOTIONS . . . . .	9	5	.4	2.7	.3	.7	1.4	6.6	6.6	12.1	.1	EE	(D)
399	MISCELLANEOUS MANUFACTURES . . . . .	78	18	2.1	14.7	1.6	3.0	9.5	37.3	21.2	58.4	1.2	1.7	21.1
3999	MANUFACTURING INDUSTRIES, NEC . . . . .	25	5	.7	3.5	.6	1.0	2.3	10.9	4.4	15.1	.2	.2	1.6
--	ADMINISTRATIVE AND AUXILIARY . . . . .	55	22	3.1	44.4	-	-	-	-	-	-	-	1.3	-

Note: The following symbols indicate employment size range for 1967:

AA less than 250 employees      EE 1,000 to 2,499 employees  
BB 250 to 499 employees      FF 2,500 employees and over  
CC 500 to 999 employees

- Represents zero. (NA) Not available. Because of a revision to this industry or industry group in the 1972 edition of the SIC manual, 1967 census data are not available on a comparable basis. (D) Withheld to avoid disclosing figures for individual companies.

<sup>1</sup>The total cost of materials and value of shipments for industry groups shown may include extensive duplication arising from shipments between establishments in the same industry classification. (For a more complete explanation, see appendix.)

<sup>2</sup>Includes figures for industry groups which have been withheld from publication in order to (a) avoid disclosing figures for individual companies or (b) permit further checking of figures for smaller industry groups. Additional detail will appear in the final report for this State.



## Appendix A. SCOPE AND COVERAGE

This report is one of a series presenting preliminary information, by State, from the 1972 Census of Manufactures. The data will be superseded in a final report which, in turn, will be included in *Volume III, Area Statistics, 1972 Census of Manufactures*. The final report will include a comprehensive discussion of the concepts and definitions used in the census.

The census of manufactures covers each manufacturing establishment in the United States with one paid employee or more; manufacturing establishments with no employees are excluded. Firms which operated more than one establishment were required to file a separate report for each location. Companies which engaged in distinctly different lines of activity at one location were asked to submit separate reports if the company records permitted such a separation and the activities were of significant size.

This report includes figures for administrative offices, warehouses, garages, or other auxiliary units which service manufacturing establishments.

In the 1972 census, the approximately 120,000 manufacturing establishments with fewer than 10 employees were excused from filing reports. Under special arrangements which safeguarded the confidentiality of both tax and census records, data on payrolls, sales, and industry classification from the administrative records of the Social Security Administration and the Internal Revenue Service were made available to the Census Bureau for use in the 1972 Economic Censuses (retail and wholesale trade, service industries, construction industries, manufactures, and mineral industries). Estimates for data other than payrolls and sales for these small establishments were constructed from industry averages. The effect on industry aggregates is slight in most industries. For manufacturing as a whole, these small establishments account for less than 3 percent of the payrolls and value added.

Establishments are classified by industry in accordance with industry definitions described in the 1972 edition of the Standard Industrial Classification (SIC) Manual. For 1972, the SIC was significantly revised and the comparability with prior year's data for some industries was significantly affected. The comparability at the 2- and 3-digit SIC levels was less affected. The final volumes of the 1972 Census of Manufactures will contain a table relating aggregates based on the 1972 SIC with aggregates derived from classifying establishments according to the 1967 SIC definitions.

As in earlier censuses, a number of small establishments may have been misclassified as to industry. However, such possible misclassifications have significant effect on *none* of the statistics except the number of establishments. As indicated above, report forms were not mailed to very small establishments (fewer than 10 employees). The industry classifications for these establishments were assigned on the basis of brief descriptions of the general activity of the establishment. Where the description is incomplete or there are relatively fine lines of demarcation among industries or between manufacturing and nonmanufacturing activity, the code assigned to an establishment could differ from that which would have been assigned on the basis of more complete product information. Therefore, the total establishment count for individual industries should be viewed as an approximation rather than a precise measurement. The counts for establishments with 20 employees or more are more reliable than the total number of establishments.

More detailed figures for this State will appear in the final census reports. Final reports will also include a comprehensive discussion of such concepts as "industry" and "establishment," as well as the various statistical items such as "employment," "value of shipments," and "value added." Similar preliminary and final reports will be issued for other States during the coming months. A series of preliminary summary reports showing U.S. totals for each manufacturing industry and for each State are being issued. Final industry reports and final area reports will be published during 1974.

Order forms describing the individual reports and listing their prices may be obtained from any U.S. Department of Commerce district office or from the Publications Distribution Section, Social and Economic Statistics Administration, Washington, D.C. 20233.

The 1972 Census of Manufactures is the 29th census of manufacturing establishments in the United States. For 1972, it was conducted jointly with the censuses of mineral industries, construction industries, retail trade, wholesale trade, and selected services under authority of Title 13 of the United States Code. Title 13 specifies that a census of manufactures be conducted every 5 years and, as amended, to cover years ending in "2" and "7". Title 13 also authorizes an annual sample survey of manufacturing establishments in interim years.



## Appendix B. EXPLANATION OF TERMS

*(For a more complete discussion of these terms and the method of compiling the Census of Manufactures, see the "Introduction" to the 1967 Census of Manufactures, Volume III).*

**All Employees**—All full-time and part-time employees on the payrolls of operating manufacturing establishments for any part of the pay period ending nearest the 12th of the months specified on the report form. Included are all persons on paid sick leave, paid holidays, and paid vacations during these pay periods. Officers of corporations are included as employees; proprietors and partners of unincorporated firms are excluded. The "all employee" number is the average number of production workers for the midmonth payroll period of March, May, August, and November plus the number of nonproduction employees in mid-March.

**Number of Production Workers**—Workers (up through the working foreman level) engaged in fabricating, processing, assembling, inspecting, receiving, packing, warehousing, shipping (but not delivering), and maintenance, repair, janitorial, and watchman services, product development, auxiliary production for plant's own use (e.g., powerplant), recordkeeping, and other closely associated services. Proprietors and partners are excluded.

**Payroll**—This item includes all forms of compensation such as salaries, wages, commissions, dismissal pay, bonuses, vacation and sick leave pay, and compensation in kind, prior to such deductions as employees' Social Security contributions, withholding taxes, group insurance, union dues, and savings bonds. The total includes salaries of officers of these establishments, if a corporation; it excludes payments to the proprietor or partners, if an unincorporated concern. Respondents were told that in reporting they could follow the definition of payrolls used for calculating the Federal withholding tax.

**Man-Hours of Production Workers**—This total relates to production-worker man-hours worked or paid for at the plant including actual overtime hours (not straight-time equivalent hours). It excludes hours paid for vacation, holidays, or sick leave when the employee was not at the plant.

**Cost of Materials**—The term "Cost of Materials" refers to charges actually paid or payable for items consumed or put into production during the year, including freight and other direct charges incurred by the establishment in acquiring these materials. It includes the cost of materials or fuel consumed regardless of

whether these items were purchased by the establishment from other companies, transferred to it from other establishments of the same company, or withdrawn from inventory during the year. The establishment was requested to value materials transferred from other parts of the company at its approximate market value, not at cost of production. The important components of this cost item are (a) all raw materials, semifinished goods, parts, components, containers, scrap, and supplies put into production or used as operating supplies and for repair and maintenance during the year; (b) electric energy purchased; (c) fuels consumed for heat, power, or the generation of electricity; (d) work done by others on materials or parts furnished by manufacturing establishments (contract work); and (e) products bought and resold in the same condition.

**Value of Shipments**—The value of shipments is the received or receivable net selling value, f.o.b. plant (exclusive of freight and taxes), of all products shipped, both primary and secondary, as well as all miscellaneous receipts such as receipts for contract work performed for others, installation and repair, sales of scrap, and sale of products bought and resold without further processing. Included are all items made by the establishment or for it under contract from materials owned by it whether sold, transferred to other plants of the same company, or shipped on consignment. The net selling value of products made in one plant on a contract basis from materials owned by another was reported by the plant providing the materials.

In the case of multiunit companies, the manufacturer was requested to report the value of products transferred to other establishments of the same company at full economic value; i.e., to include not only the direct costs of production but also a reasonable proportion of "all other costs" (including company overhead) and profit.

**Duplication in Cost of Materials and Value of Products**—The aggregate cost of materials and value-of-shipments figures for industry groups and for all manufacturing industries may include large amounts of duplication since the products of some industries are used as materials by others. With some important exceptions, such as motor vehicles and parts, this duplication is not significant within individual industries but arises from the addition of the totals of related industries in successive stages of the production of a finished manufactured product. Examples are the addition of flour mills to bakeries in the food group and the addition of pulp mills to paper mills in the paper and allied products group of industries. Esti-



mates of this duplication indicate that the value of manufactured products exclusive of such duplication—the value of finished manufactures—approximates two-thirds of the total value of products.

Prior to 1962, the Bureau of the Census did not publish figures for cost of materials or value of shipments if they contained significant duplication. Effective with the 1962 annual survey these figures were shown at all industry levels for the United States to meet the requests for their use in studies in which the presence of an indeterminate amount of duplication is not a limiting factor. However, they are appropriately footnoted. Effective with the 1964 annual survey, these industry group totals are also shown at the State, standard metropolitan statistical area, and large-county level.

Even where there is no significant amount of duplication, value-of-shipments figures are deficient as measures of the relative economic importance of individual manufacturing industries or geographic areas because of the wide variation in ratio of materials, labor, and other processing costs to value of shipments among industries.

**Value Added by Manufacture**—This measure of manufacturing activity is derived by subtracting the cost of materials, supplies, containers, fuel, purchased electricity, and cost of resales contract work from the value of shipments for products manufactured plus resales and receipts for services rendered. The result of this calculation is adjusted by the net change in finished goods and work-in-process inventories between the beginning and end of the year. (In the few industries that report value of production rather than value of shipments, only changes in work-in-process inventories are used to adjust value added. In the shipbuilding and repairing industry, no inventory adjustment is made.)

"Value added" avoids the duplication in the value of shipments figure which results from the use of products of some establishments as materials by others. Value added is considered to be the best value measure available for comparing the relative economic importance of manufacturing among industries and geographic areas.

**Expenditures for Plant and Equipment**—Manufacturing establishments in operation and establishments under construction but not yet in operation, were asked to report their expenditures for (a) permanent additions and major alterations to the manufacturing establishment, and (b) new machinery and equipment used for replacement purposes and additions to plant capacity if they are of the type for which depreciation accounts are ordinarily maintained.

These totals exclude expenditures for new facilities and equipment leased from nonmanufacturing concerns; new facilities owned by the Federal Government but operated under contract by private companies; and plant and equipment furnished to the manufacturer by communities and nonprofit organizations. Expenditures for used plant and equipment (although reported in the census), expenditures for land, and cost of maintenance and repairs charged as current operating expense are also omitted from the figures for new capital expenditures.

**Central Administrative Offices and Auxiliary Units**—In the 1972 census as in previous years, respondents were asked to file separate reports for central administrative offices or auxiliary units which were (1) at different locations from the establishments served or, (2) at the same location as one of these establishments but were not operated as an integral part thereof and served two or more establishments. The functions of employees in central administrative offices include general company policy determination, planning and management (that is, company purchasing, accounting, general engineering, direction of company personnel matters, and legal and patent matters). Auxiliaries are storage facilities, garages, repair shops, purchasing offices, sales promotion offices, and research laboratories serving the plants or central management of the company.

**Standard Metropolitan Statistical Areas**—Standard metropolitan statistical areas (SMSA) are integrated economic and social units with a large volume of daily travel and communication between the central city and outlying parts of the area.<sup>1</sup> Each area (except in New England) consists of one whole county or more. An area may contain not only highly industrialized counties but also adjoining counties which, though primarily residential in character, contribute significantly to the industrial counties' labor force and are socially and economically integrated with the central city. These areas are defined by the Federal Committee on Standard Metropolitan Statistical Areas of the Office of Management and Budget for general-purpose use throughout the Federal Government in presenting economic and social data. In the New England States, similar intergration criteria are applied in defining

<sup>1</sup> Each standard metropolitan statistical area must include either (1) a city with 50,000 or more inhabitants, or (2) a city having a population of at least 25,000 which (a) with the addition of the population of contiguous places has a population density of at least 1,000 persons per square mile; (b) constitutes, for general economic and social purposes, a single community with a combined population of at least 50,000; and (c) includes a total population of at least 75,000 in the county or counties in which the city and contiguous places are located.

SMSA's on a city and town basis because towns rather than counties are regarded as the significant unit in this region of the country.

The requirement that each SMSA consist of county units (except in New England) sometimes results in the inclusion in an area of considerable amount of territory which would not ordinarily be considered "metropolitan," much less "industrial." It is recognized that metropolitan areas could be more accurately defined in terms of smaller area segments such as minor civil

divisions, but the usefulness of areas so defined would be limited by the fact that many types of economic and social data are available only on a county basis.

Each SMSA is designated by the name of the principal city of the area. In addition to the name of the principal city, the area title may include one or two additional city names.

The data for SMSA's which changed definition since the 1967 census have not been retabulated on the new basis for years prior to 1972.







## PRELIMINARY REPORT

**1972 CENSUS OF  
MANUFACTURES**

## AREA SERIES

72(P)-S17

U. S. DEPARTMENT OF COMMERCE • Social and Economic Statistics Administration • BUREAU OF THE CENSUS

**Kansas**

Value added by manufacturing in 1972 in the State of Kansas amounted to \$2,842 million, an 11-percent increase from 1971 and a 35-percent increase from 1967.

This report presents preliminary results from the 1972 Census of Manufactures for the State, its Standard Metropolitan Statistical Areas, and its counties.

Data are provided for industry groups within the State. Historical data, back to 1958, are included for the State as a whole,

and 1967 figures on employment and value added are provided for the smaller areas.

The figures in this report have been subjected to only preliminary review and must be regarded as approximations of the final census figures. No adjustments have been made in the value figures for changes in price level.

For an explanation of the terms used in the tables, see the appendix at the end of this report.

**TABLE 1. General Statistics for the State: 1972 and Earlier Years**

(See appendix, Explanation of Terms)

Year	Establishments		All employees <sup>1</sup>		Production workers			Value added by manufacture	Cost of materials <sup>2</sup>	Value of shipments <sup>2</sup>	Capital expenditures, new
	Total	With 20 employees or more	Number	Payroll	Number	Man-hours	Wages				
	(number)	(number)	(1,000)	(million dollars)	(1,000)	(millions)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(million dollars)
KANSAS											
1972 Census .....	2,804	946	137.2	1,194.3	100.7	201.7	778.6	2,841.6	5,019.3	7,765.9	197.1
1971 ASM .....	(NA)	(NA)	123.8	1,019.3	89.6	175.5	669.2	2,560.6	3,992.5	6,507.0	132.5
1970 ASM .....	(NA)	(NA)	130.4	988.8	92.5	185.2	646.2	2,294.5	3,419.6	5,738.2	138.7
1969 ASM .....	(NA)	(NA)	143.6	1,031.2	104.9	208.9	684.4	2,456.4	3,680.0	6,092.0	122.4
1968 ASM .....	(NA)	(NA)	144.7	1,009.3	105.9	218.5	583.7	2,332.5	3,448.0	5,785.5	133.7
1967 Census .....	2,551	812	143.8	964.8	106.5	218.1	655.4	2,112.4	3,281.9	5,372.3	155.9
1966 ASM .....	(NA)	(NA)	135.5	880.8	102.6	215.2	610.1	1,955.6	3,159.6	5,102.8	113.4
1965 ASM .....	(NA)	(NA)	120.6	755.9	89.2	187.6	517.7	1,699.8	2,921.1	4,627.8	94.6
1964 ASM .....	(NA)	(NA)	120.0	746.5	88.4	187.5	513.2	1,570.2	2,651.3	4,202.7	101.4
1963 Census .....	2,475	696	114.3	684.4	84.6	176.9	463.2	1,461.6	(NA)	(NA)	106.3
1962 ASM .....	(NA)	(NA)	114.1	661.9	83.6	170.7	437.6	1,357.0	(NA)	(NA)	73.1
1961 ASM .....	(NA)	(NA)	108.9	610.6	79.7	159.7	399.7	1,266.8	(NA)	(NA)	56.7
1960 ASM .....	(NA)	(NA)	111.3	602.3	81.3	164.1	402.5	1,237.7	(NA)	(NA)	59.4
1959 ASM .....	(NA)	(NA)	116.1	613.6	85.7	174.4	419.1	1,202.7	(NA)	(NA)	76.9
1958 Census .....	2,309	643	118.8	590.8	86.5	173.9	403.7	1,171.0	(NA)	(NA)	99.0

Note: "ASM" data are based on a representative sample of manufacturing establishments canvassed in the Annual Survey of Manufactures. These estimates may differ from the results of a complete canvass of all manufacturing establishments. The standard errors associated with these estimates are published in the annual survey of manufactures volumes for this period. For comparative purposes, the 1972 ASM estimate for the State of Kansas was 136 thousand employees, and \$2,930 million in value added with corresponding standard error of estimate of 2 and 2.

(NA) Not available

<sup>1</sup>Includes employment and payroll at central administrative offices and auxiliary units. (For a definition of these units, see appendix.)

<sup>2</sup>The total cost of materials and value of shipments may include extensive duplication arising from shipments between establishments in the same industry classification. (For a more complete explanation, see appendix.)

TABLE 2. General Statistics for the State, Standard Metropolitan Statistical Areas, and Counties: 1972 and 1967

(See appendix, Explanation of Terms)

State, standard metropolitan statistical areas, and counties <sup>1</sup>	1972										1967		
	Establishments		All employees <sup>2</sup>		Production workers			Value added by manufac- ture	Cost of materials <sup>3</sup>	Value of shipments <sup>3</sup>	Capital expendi- tures, new	All employees	Value added by manufac- ture
	Total	With 20 employees or more	Number	Payroll	Number	Man-hours	Wages						
	(number)	(number)	(1,000)	(million dollars)	(1,000)	(million)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(1,000)	(million dollars)
KANSAS, TOTAL. . . . .	2 804	946	137.2	1 194.3	100.7	201.7	778.6	2 841.6	5 019.3	7 765.9	197.1	143.8	2 112.4
STANDARD METROPOLITAN STATISTICAL AREAS <sup>4</sup>													
KANSAS CITY. . . . .	1 870	697	120.0	1 153.6	78.4	152.5	679.9	2 875.9	3 963.5	6 764.0	155.4	129.4	2 070.7
PORTION IN MISSOURI. . . . .	1 376	492	88.5	852.1	56.2	109.2	486.2	2 008.6	2 606.4	4 553.5	111.1	97.6	1 449.1
PORTION IN KANSAS. . . . .	494	205	31.5	301.5	22.2	43.3	193.7	867.3	1 351.1	2 210.5	44.3	31.7	621.6
TOPEKA. . . . .	154	55	9.5	87.7	7.1	14.9	64.9	233.0	229.2	462.3	32.5	8.3	168.9
WICHITA. . . . .	556	178	38.5	359.2	27.3	56.8	226.2	771.3	1 104.5	1 826.6	40.3	57.7	730.3
COUNTIES													
ALLEN. . . . .	24	9	.9	6.8	.7	1.3	4.7	15.3	9.7	24.7	1.6	.8	10.3
ATCHISON. . . . .	21	8	1.6	12.4	1.3	2.4	9.0	29.4	44.2	74.0	2.3	1.9	19.7
BARTON. . . . .	48	11	1.1	9.0	.9	1.9	6.2	15.5	45.5	61.2	1.4	.9	10.6
BOURBON. . . . .	23	10	.8	4.2	.6	1.3	2.7	9.7	11.0	20.7	.7	.7	5.8
BROWN. . . . .	14	5	.5	3.0	.5	1.0	2.6	4.7	2.3	7.1	.2	.5	3.2
BUTLER. . . . .	46	10	1.3	12.9	1.0	2.1	8.0	73.0	233.2	308.4	11.9	1.6	77.6
CHEROKEE. . . . .	29	8	.6	3.4	.5	.9	2.6	7.3	7.0	14.0	.2	1.5	29.8
CLAY. . . . .	12	4	.5	3.0	.4	.8	2.2	3.8	12.1	15.8	.2	.4	3.3
CLOUD. . . . .	17	4	.3	1.6	.2	.4	1.0	3.6	4.9	8.5	.4	.3	2.4
COWLEY. . . . .	42	14	2.7	25.5	2.1	3.9	16.3	61.0	165.6	224.7	3.6	1.8	29.6
CRAWFORD. . . . .	63	24	2.8	22.2	2.0	3.5	14.6	35.6	56.4	93.8	5.7	1.9	24.4
DICKINSON. . . . .	25	4	.5	3.8	.3	.6	2.4	7.7	16.2	22.9	.2	.7	8.5
DOUGLAS. . . . .	59	21	3.5	28.2	2.5	5.1	19.6	57.8	69.8	123.2	6.6	2.9	46.1
ELLSWORTH. . . . .	11	3	.6	3.6	.6	1.3	3.0	9.6	6.9	14.1	.2	.1	.8
FINNEY. . . . .	30	8	.7	5.6	.5	1.1	3.8	14.7	98.0	111.2	1.0	.5	8.5
FORD. . . . .	40	15	1.2	9.2	.8	1.6	5.1	25.2	76.0	100.8	2.8	1.0	12.1
FRANKLIN. . . . .	25	8	1.0	5.9	.8	1.5	4.3	10.5	14.0	23.9	1.0	.9	7.2
GEARY. . . . .	17	6	.5	3.6	.4	.8	2.4	7.0	15.9	22.6	.5	.2	1.6
GRANT. . . . .	9	4	.4	2.7	.3	.6	1.7	7.9	8.4	15.7	.5	.1	1.8
HARVEY. . . . .	52	26	3.4	22.1	2.8	5.0	15.2	62.7	78.4	140.1	3.6	2.7	35.0
JOHNSON. . . . .	217	82	10.6	90.5	6.6	12.7	44.9	144.0	135.3	278.0	18.0	9.1	108.1
LABETTE. . . . .	51	22	3.4	21.8	2.3	4.6	12.5	23.6	39.1	62.2	2.1	2.0	11.9
LEAVENWORTH. . . . .	29	12	1.4	11.6	1.1	2.1	8.6	21.6	30.7	51.9	1.3	1.2	10.3
MC PHERSON. . . . .	44	18	1.9	14.8	1.5	3.0	10.1	27.8	105.5	132.2	3.9	1.1	17.5
MARTON. . . . .	22	5	.3	1.9	.2	.5	1.4	4.4	18.0	22.0	1.5	.3	3.7
MIAMI. . . . .	17	6	.6	5.0	.5	1.0	3.5	8.3	7.0	15.1	.3	.7	8.0
MONTGOMERY. . . . .	79	37	4.3	33.0	3.2	6.3	22.8	65.2	136.4	199.0	6.4	4.3	46.9
NEOSHO. . . . .	45	20	1.6	11.0	1.3	2.4	7.2	24.9	28.8	53.1	1.1	1.0	13.1
RENO. . . . .	105	43	5.6	43.4	4.3	8.7	29.5	91.2	98.1	187.9	6.4	5.3	65.0
RICE. . . . .	18	5	.4	2.9	.3	.6	2.0	7.0	4.3	11.3	3.5	.4	8.9
RILEY. . . . .	21	4	.3	1.9	.2	.4	1.4	3.4	4.1	7.5	.1	.3	3.1
SALINE. . . . .	65	20	2.1	14.4	1.6	3.2	9.7	44.8	45.8	91.2	2.7	1.5	21.4
SEDGWICK. . . . .	510	168	37.2	346.3	26.3	54.7	218.2	698.3	871.3	1 518.2	28.4	56.1	652.7
SHAWNEE. . . . .	132	53	9.2	85.9	6.9	14.3	63.2	230.0	223.3	453.3	(D)	8.3	168.9
SUMNER. . . . .	30	10	.6	5.2	.5	1.2	3.9	8.4	23.9	32.2	.4	.6	7.7
WILSON. . . . .	27	11	1.0	7.7	.7	1.5	5.2	16.7	56.5	73.1	1.7	1.0	17.4
WYANDOTTE. . . . .	277	123	20.9	211.0	15.6	30.7	148.9	723.3	1 215.8	1 932.5	26.3	22.6	513.5

(D) Withheld to avoid disclosing figures for individual companies.

<sup>1</sup>Some counties were withheld from publication in order to (a) avoid disclosing figures for individual companies or (b) permit further checking of the figures for small counties.

Additional detail will appear in the final report for this State.

<sup>2</sup>Includes employment and payroll at central administrative offices and auxiliary units. (For a definition of these units, see appendix.)<sup>3</sup>The total cost of materials and value of shipments may include extensive duplication arising from shipments between establishments in the same industry classification. (For a more complete explanation, see appendix.)<sup>4</sup>The standard metropolitan statistical areas in this State are defined as follows:

KANSAS CITY, MO-KS, SMSA: Consists of Cass, Clay, Jackson, Platte, and Ray Counties, MO, and Johnson and Wyandotte Counties, KS.

TOPEKA SMSA: Consists of Jefferson, Osage, and Shawnee Counties, KS.

WICHITA SMSA: Consists of Butler and Sedgwick Counties, KS.



TABLE 3. General Statistics for the State, by Industry Groups and Industries: 1972 and 1967

(See appendix, Explanation of Terms)

Code	Industry	1972											1967	
		Establishments		All employees		Production workers			Value added by manufacture	Cost of materials <sup>1</sup>	Value of shipments <sup>1</sup>	Capital expenditures, new	All employees	Value added by manufacture
		Total (number)	With 20 employees or more (number)	Number (1,000)	Payroll (million dollars)	Number (1,000)	Man-hours (million)	Wages (million dollars)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(1,000)	(million dollars)
	ALL INDUSTRIES, TOTAL <sup>2</sup> . . . . .	2 804	946	137.2	1 194.3	100.7	201.7	778.6	7 841.6	5 019.3	7 765.9	197.1	143.8	2 112.4
20	FOOD AND KINDRED PRODUCTS. . . . .	408	152	18.8	156.3	12.8	26.8	100.6	433.8	2 096.8	2 506.1	42.5	18.8	277.8
201	MEAT PRODUCTS. . . . .	78	32	6.8	63.0	5.5	12.0	40.0	137.9	1 370.0	1 511.4	8.3	7.1	87.3
2011	MEATPACKING PLANTS. . . . .	60	22	5.3	50.6	4.4	9.9	40.3	120.1	1 306.7	1 420.8	7.3	6.0	71.2
2013	SAUSAGES AND OTHER PREPARED MEATS. . . . .	13	6	1.0	9.4	.7	1.5	6.9	13.4	54.5	67.7	.9	.4	9.5
202	DAIRY PRODUCTS. . . . .	67	24	2.5	16.8	1.0	2.0	7.3	40.5	112.5	152.9	3.7	2.4	30.7
204	GRAIN MILL PRODUCTS. . . . .	110	43	3.2	27.3	2.3	5.5	18.3	110.2	335.7	443.3	16.8	3.0	67.4
2041	FLOUR AND OTHER GRAIN MILL PRODUCTS. . . . .	31	21	1.4	12.4	1.1	2.7	9.4	51.0	219.0	267.6	2.8	1.7	41.0
205	BAKERY PRODUCTS. . . . .	37	14	2.5	22.1	1.6	3.1	12.1	49.2	37.0	85.7	1.7	FF	(D)
207	FATS AND OILS. . . . .	13	7	.5	3.8	.4	.8	2.6	37.4	184.2	199.7	6.4	(NA)	(NA)
2075	SOYBEAN OIL MILLS. . . . .	4	4	.3	2.5	.2	.6	1.9	34.4	175.9	188.4	6.2	.2	8.1
208	BEVERAGES. . . . .	40	23	1.5	12.1	.7	1.4	4.7	26.1	41.8	67.9	3.7	1.5	16.1
209	MISC. FOODS AND KINDRED PRODUCTS. . . . .	44	7	1.1	7.5	.6	1.0	3.4	25.5	21.4	46.9	(D)	(NA)	(NA)
2099	FOOD PREPARATIONS, NEC. . . . .	24	5	.8	5.2	.5	.7	2.4	19.8	14.1	33.9	(D)	.5	9.3
23	APPAREL, OTHER TEXTILE PRODUCTS. . . . .	68	36	4.1	20.1	3.5	6.6	16.6	36.5	41.1	81.2	4.4	4.6	43.1
232	MEN'S AND BOYS' FURNISHINGS. . . . .	11	8	1.4	5.9	1.2	2.2	5.0	10.8	11.1	22.4	(D)	EE	(D)
233	WOMEN'S AND MISSES' OUTERWEAR. . . . .	16	13	1.6	8.7	1.5	2.7	7.6	18.8	21.2	41.2	(D)	1.0	5.2
239	MISC. FABRICATED TEXTILE PRODUCTS. . . . .	35	10	.6	2.5	.4	.8	2.0	4.3	7.0	11.2	.2	.7	3.6
24	LUMBER AND WOOD PRODUCTS. . . . .	130	42	4.4	31.6	3.7	7.3	23.7	57.5	115.5	171.8	2.6	(NA)	(NA)
242	SAWMILLS AND PLANING MILLS. . . . .	24	7	.3	2.0	.2	.5	1.3	4.5	10.7	15.1	.1	AA	(D)
2434	WOOD KITCHEN CABINETS. . . . .	18	4	.3	2.4	.3	.6	1.8	3.4	2.8	6.3	.4	(NA)	(NA)
245	WOOD BUILDINGS AND MOBILE HOMES. . . . .	24	18	2.9	21.8	2.5	4.9	16.8	40.0	86.3	125.3	1.6	(NA)	(NA)
2451	MOBILE HOMES. . . . .	21	18	2.8	21.6	2.5	4.9	16.8	39.6	85.8	124.3	1.6	(NA)	(NA)
25	FURNITURE AND FIXTURES. . . . .	66	21	2.1	14.7	1.6	3.2	10.3	29.6	28.7	56.8	1.7	1.7	17.5
251	HOUSEHOLD FURNITURE. . . . .	30	8	1.1	7.3	.9	1.8	5.6	16.1	16.6	31.9	.5	(NA)	(NA)
2515	MATTRESSES AND BEDSPRINGS. . . . .	13	5	.8	5.5	.6	1.2	4.2	11.8	11.2	22.1	.4	.8	8.9
254	PARTITIONS AND FIXTURES. . . . .	18	5	.5	3.4	.4	.7	2.3	6.3	7.0	12.8	1.0	(NA)	(NA)
27	PRINTING AND PUBLISHING. . . . .	529	109	11.7	87.7	8.1	15.8	59.3	155.9	81.4	232.5	11.2	10.1	111.6
2711	NEWSPAPERS. . . . .	219	40	3.5	24.9	1.8	3.3	13.1	48.4	12.9	61.4	3.4	3.5	36.1
273	BOOKS. . . . .	10	4	.5	3.0	.4	.7	2.1	6.5	2.5	8.9	.1	(NA)	(NA)
2741	MISCELLANEOUS PUBLISHING. . . . .	22	6	1.0	5.8	.8	1.6	4.3	12.0	5.2	16.8	.7	CC	(D)
275	COMMERCIAL PRINTING. . . . .	210	35	3.0	24.6	2.4	4.6	17.6	41.9	24.9	64.1	3.5	(NA)	(NA)
2751	COMMERCIAL PRINTING, LETTERPRESS. . . . .	131	14	1.2	8.5	.9	1.5	5.3	15.3	11.4	26.8	1.2	(NA)	(NA)
2761	MANIFOLD BUSINESS FORMS. . . . .	12	9	1.0	7.5	.7	1.6	5.1	14.2	9.8	23.7	1.9	CC	(D)
28	CHEMICALS AND ALLIED PRODUCTS. . . . .	101	48	6.0	61.7	3.9	8.1	37.1	313.6	219.9	524.6	27.2	10.1	276.3
281	INDUSTRIAL INORGANIC CHEMICALS. . . . .	21	15	1.4	14.5	.9	1.9	8.8	78.5	61.6	138.3	8.5	(NA)	(NA)
2813	INDUSTRIAL GASES. . . . .	15	10	.5	5.4	.3	.6	3.1	45.0	26.6	69.1	(D)	.3	33.3
283	DRUGS. . . . .	12	5	.6	5.4	.3	.6	2.0	18.3	10.0	27.5	3.6	.4	6.9
287	AGRICULTURAL CHEMICALS. . . . .	12	6	.8	7.5	.5	1.0	4.4	28.9	34.8	64.1	(D)	(NA)	(NA)
289	MISCELLANEOUS CHEMICAL PRODUCTS. . . . .	20	10	1.2	11.0	.9	1.9	7.2	26.1	18.0	40.8	(D)	(NA)	(NA)
29	PETROLEUM AND COAL PRODUCTS. . . . .	26	18	3.4	35.2	2.6	5.3	24.3	164.1	625.4	794.6	22.4	3.6	179.7
2911	PETROLEUM REFINING. . . . .	12	12	2.8	31.0	2.2	4.5	21.4	146.3	606.4	758.9	20.7	FF	(D)
299	MISC. PETROLEUM AND COAL PRODUCTS. . . . .	8	4	.3	2.6	.2	.4	1.5	12.4	11.9	24.0	.5	(NA)	(NA)
2992	LUBRICATING OILS AND GREASES. . . . .	8	4	.3	2.6	.2	.4	1.5	12.4	11.9	24.0	.5	(NA)	(NA)
30	RUBBER AND MISC. PLASTICS PROD. . . . .	84	34	6.2	59.2	5.1	10.4	46.4	169.0	139.1	306.1	20.6	(NA)	(NA)
32	STONE, CLAY, AND GLASS PRODUCTS. . . . .	207	61	6.2	60.3	5.0	10.2	44.9	136.5	104.6	246.3	7.7	6.4	91.3
3241	CEMENT, HYDRAULIC. . . . .	6	5	.8	8.9	.6	1.3	6.9	25.7	10.1	35.3	1.9	CC	(D)
325	STRUCTURAL CLAY PRODUCTS. . . . .	7	7	.6	5.1	.5	1.1	4.0	8.9	4.2	13.8	.4	.7	7.1
327	CONCRETE, GYPSUM, PLASTER PRODUCTS. . . . .	149	34	2.2	19.1	1.5	3.2	12.1	37.6	38.2	75.3	3.7	2.1	27.4
3272	CONCRETE PRODUCTS, NEC. . . . .	40	10	.7	6.2	.6	1.2	4.0	12.4	6.8	19.0	1.0	.5	6.4
3273	READY-MIXED CONCRETE. . . . .	93	20	1.0	9.2	.7	1.3	5.3	18.0	23.5	41.5	2.3	1.1	14.6
332	IRON AND STEEL FOUNDRIES. . . . .	17	13	1.1	7.8	1.0	1.8	5.9	15.5	8.4	23.9	.7	2.0	19.2
34	FABRICATED METAL PRODUCTS. . . . .	220	92	10.6	80.0	8.3	16.4	56.5	187.3	207.3	391.1	17.0	(NA)	(NA)
341	METAL CANS AND SHIPPING CONTAINERS. . . . .	7	5	.3	2.7	.3	.5	2.3	6.7	14.2	20.8	.4	(NA)	(NA)
342	CUTLERY, HANDTOOLS AND HARDWARE. . . . .	15	6	.7	4.4	.6	1.1	3.0	12.7	10.1	22.5	.9	.5	6.0
344	FABRICATED STRUCTURAL METAL PROD. . . . .	112	57	4.3	32.5	3.2	6.2	20.8	68.8	81.7	148.5	8.4	3.3	41.7
3441	FABRICATED STRUCTURAL METAL PRODUCTS. . . . .	21	13	1.2	9.7	.9	1.8	6.5	21.2	22.8	42.8	.6	1.3	17.9
3442	METAL DOORS, SASH, AND TRIM. . . . .	24	14	.9	5.2	.8	1.5	3.4	10.7	15.1	25.8	.9	.5	4.7
3443	FABRICATED PLATEWORK (BOILERS SHOP). . . . .	16	12	1.0	7.6	.7	1.4	5.0	13.7	14.1	28.2	1.1	.7	7.0
3444	SHEET METALWORK. . . . .	29	12	.6	5.6	.5	1.0	3.9	13.2	19.2	31.5	4.8	.4	4.6
3446	ARCHITECTURAL METALWORK. . . . .	16	3	.3	2.3	.2	.4	1.3	5.4	4.3	9.6	.2	AA	(D)
349	MISC. FABRICATED METAL PRODUCTS. . . . .	34	11	.7	5.5	.6	1.2	4.0	15.7	17.6	32.7	.9	(NA)	(NA)
3496	MISC. FABRICATED WIRE PRODUCTS. . . . .	9	4	.3	1.9	.2	.4	1.3	4.1	4.2	8.0	.2	(NA)	(NA)
35	MACHINERY, EXCEPT ELECTRICAL. . . . .	448	127	16.6	131.7	12.4	23.6	83.8	258.4	226.9	478.8	14.0	14.2	174.0
352	FARM AND GARDEN MACHINERY. . . . .	113	46	5.1	34.5	3.9	7.6	22.6	74.0	77.8	149.8	4.6	(NA)	(NA)
3524	LAWN AND GARDEN EQUIPMENT. . . . .	4	4	.4	3.0	.3	.7	2.1	5.1	4.2	9.4	.2	(NA)	(NA)
355	SPECIAL INDUSTRY MACHINERY. . . . .	32	14	1.7	15.4	1.1	2.2	8.2	31.7	21.1	50.5	1.2	1.1	15.3
356	GENERAL INDUSTRIAL MACHINERY. . . . .	34	13	3.8	32.2	2.8	5.2	20.5	59.6	45.8	103.5	2.2	2.2	30.6

See footnotes at end of table.

TABLE 3. General Statistics for the State, by Industry Groups and Industries: 1972 and 1967—Continued

(See appendix, Explanation of Terms)

Code	Industry	1972										1967		
		Establishments		All employees		Production workers			Value added by manufacture	Cost of materials <sup>1</sup>	Value of shipments <sup>1</sup>	Capital expenditures, 1967	All employees	Value added by manufacture
		Total	With 20 employees or more	Number	Payroll	Number	Man-hours	Wages						
		(number)	(number)	(1,000)	(million dollars)	(1,000)	(million)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(1,000)	(million dollars)
358	REFRIGERATION, SERVICE MACHINERY .	10	5	.6	4.1	.4	.8	2.8	9.7	11.8	21.2	.2	.6	9.7
359	MISC. MACHINERY, EXCEPT ELECTRICAL	174	17	1.8	14.6	1.4	2.9	9.9	24.6	13.0	36.6	1.6	(NA)	(NA)
36	ELECTRIC, ELECTRONIC EQUIPMENT .	63	25	3.8	28.3	2.9	5.8	19.1	67.6	43.7	110.9	4.1	(NA)	(NA)
367	ELECTRONIC COMPONENTS AND ACCESS .	19	10	1.0	5.4	.7	1.3	4.0	11.2	4.3	15.3	.6	EE	(D)
37	TRANSPORTATION EQUIPMENT . . . .	151	63	30.5	300.6	23.5	48.0	208.9	689.4	935.0	1 580.7	12.3	(NA)	(NA)
3714	MOTOR VEHICLE PARTS AND ACCESSORIES.	10	5	1.3	8.4	1.1	2.4	6.9	18.4	17.9	35.9	1.1	.3	3.0
373	SHIP, BOAT BUILDING & REPAIRING. .	18	4	.6	4.8	.5	1.0	3.8	6.3	20.8	27.1	.3	AA	(D)
394	TOYS AND SPORTING GOODS. . . . .	24	1	.3	2.0	.3	.5	1.3	4.3	4.8	9.1	.2	.2	1.1
3949	SPORTING AND ATHLETIC GOODS, NEC . .	14	1	.3	1.7	.2	.4	1.2	3.6	4.2	7.8	D	.2	1.0
--	ADMINISTRATIVE AND AUXILIARY . .	70	30	3.9	48.0	-	-	-	-	-	-	-	1.8	-

Note: The following symbols indicate employment size range for 1967:

AA less than 250 employees      EE 1,000 to 2,499 employees  
BB 250 to 499 employees      FF 2,500 employees and over  
CC 500 to 999 employees

- Represents zero. (NA) Not available. Because of a revision to this industry or industry group in the 1972 edition of the SIC manual, 1967 census data are not available on a comparable basis. (D) Withheld to avoid disclosing figures for individual companies.

<sup>1</sup>The total cost of materials and value of shipments for industry groups shown may include extensive duplication arising from shipments between establishments in the same industry classification. (For a more complete explanation, see appendix.)

<sup>2</sup>Includes figures for industry groups which have been withheld from publication in order to (a) avoid disclosing figures for individual companies or (b) permit further checking of figures for smaller industry groups. Additional detail will appear in the final report for this State.



## Appendix A. SCOPE AND COVERAGE

This report is one of a series presenting preliminary information, by State, from the 1972 Census of Manufactures. The data will be superseded in a final report which, in turn, will be included in *Volume III, Area Statistics, 1972 Census of Manufactures*. The final report will include a comprehensive discussion of the concepts and definitions used in the census.

The census of manufactures covers each manufacturing establishment in the United States with one paid employee or more; manufacturing establishments with no employees are excluded. Firms which operated more than one establishment were required to file a separate report for each location. Companies which engaged in distinctly different lines of activity at one location were asked to submit separate reports if the company records permitted such a separation and the activities were of significant size.

This report includes figures for administrative offices, warehouses, garages, or other auxiliary units which service manufacturing establishments.

In the 1972 census, the approximately 120,000 manufacturing establishments with fewer than 10 employees were excused from filing reports. Under special arrangements which safeguarded the confidentiality of both tax and census records, data on payrolls, sales, and industry classification from the administrative records of the Social Security Administration and the Internal Revenue Service were made available to the Census Bureau for use in the 1972 Economic Censuses (retail and wholesale trade, service industries, construction industries, manufactures, and mineral industries). Estimates for data other than payrolls and sales for these small establishments were constructed from industry averages. The effect on industry aggregates is slight in most industries. For manufacturing as a whole, these small establishments account for less than 3 percent of the payrolls and value added.

Establishments are classified by industry in accordance with industry definitions described in the 1972 edition of the Standard Industrial Classification (SIC) Manual. For 1972, the SIC was significantly revised and the comparability with prior year's data for some industries was significantly affected. The comparability at the 2- and 3-digit SIC levels was less affected. The final volumes of the 1972 Census of Manufactures will contain a table relating aggregates based on the 1972 SIC with aggregates derived from classifying establishments according to the 1967 SIC definitions.

As in earlier censuses, a number of small establishments may have been misclassified as to industry. However, such possible misclassifications have significant effect on *none* of the statistics except the number of establishments. As indicated above, report forms were not mailed to very small establishments (fewer than 10 employees). The industry classifications for these establishments were assigned on the basis of brief descriptions of the general activity of the establishment. Where the description is incomplete or there are relatively fine lines of demarcation among industries or between manufacturing and nonmanufacturing activity, the code assigned to an establishment could differ from that which would have been assigned on the basis of more complete product information. Therefore, the total establishment count for individual industries should be viewed as an approximation rather than a precise measurement. The counts for establishments with 20 employees or more are more reliable than the total number of establishments.

More detailed figures for this State will appear in the final census reports. Final reports will also include a comprehensive discussion of such concepts as "industry" and "establishment," as well as the various statistical items such as "employment," "value of shipments," and "value added." Similar preliminary and final reports will be issued for other States during the coming months. A series of preliminary summary reports showing U.S. totals for each manufacturing industry and for each State are being issued. Final industry reports and final area reports will be published during 1974.

Order forms describing the individual reports and listing their prices may be obtained from any U.S. Department of Commerce district office or from the Publications Distribution Section, Social and Economic Statistics Administration, Washington, D.C. 20233.

The 1972 Census of Manufactures is the 29th census of manufacturing establishments in the United States. For 1972, it was conducted jointly with the censuses of mineral industries, construction industries, retail trade, wholesale trade, and selected services under authority of Title 13 of the United States Code. Title 13 specifies that a census of manufactures be conducted every 5 years and, as amended, to cover years ending in "2" and "7". Title 13 also authorizes an annual sample survey of manufacturing establishments in interim years.



## Appendix B. EXPLANATION OF TERMS

*(For a more complete discussion of these terms and the method of compiling the Census of Manufactures, see the "Introduction" to the 1967 Census of Manufactures, Volume III).*

**All Employees**—All full-time and part-time employees on the payrolls of operating manufacturing establishments for any part of the pay period ending nearest the 12th of the months specified on the report form. Included are all persons on paid sick leave, paid holidays, and paid vacations during these pay periods. Officers of corporations are included as employees; proprietors and partners of unincorporated firms are excluded. The "all employee" number is the average number of production workers for the midmonth payroll period of March, May, August, and November plus the number of nonproduction employees in mid-March.

**Number of Production Workers**—Workers (up through the working foreman level) engaged in fabricating, processing, assembling, inspecting, receiving, packing, warehousing, shipping (but not delivering), and maintenance, repair, janitorial, and watchman services, product development, auxiliary production for plant's own use (e.g., powerplant), recordkeeping, and other closely associated services. Proprietors and partners are excluded.

**Payroll**—This item includes all forms of compensation such as salaries, wages, commissions, dismissal pay, bonuses, vacation and sick leave pay, and compensation in kind, prior to such deductions as employees' Social Security contributions, withholding taxes, group insurance, union dues, and savings bonds. The total includes salaries of officers of these establishments, if a corporation; it excludes payments to the proprietor or partners, if an unincorporated concern. Respondents were told that in reporting they could follow the definition of payrolls used for calculating the Federal withholding tax.

**Man-Hours of Production Workers**—This total relates to production-worker man-hours worked or paid for at the plant including actual overtime hours (not straight-time equivalent hours). It excludes hours paid for vacation, holidays, or sick leave when the employee was not at the plant.

**Cost of Materials**—The term "Cost of Materials" refers to charges actually paid or payable for items consumed or put into production during the year, including freight and other direct charges incurred by the establishment in acquiring these materials. It includes the cost of materials or fuel consumed regardless of

whether these items were purchased by the establishment from other companies, transferred to it from other establishments of the same company, or withdrawn from inventory during the year. The establishment was requested to value materials transferred from other parts of the company at its approximate market value, not at cost of production. The important components of this cost item are (a) all raw materials, semifinished goods, parts, components, containers, scrap, and supplies put into production or used as operating supplies and for repair and maintenance during the year; (b) electric energy purchased; (c) fuels consumed for heat, power, or the generation of electricity; (d) work done by others on materials or parts furnished by manufacturing establishments (contract work); and (e) products bought and resold in the same condition.

**Value of Shipments**—The value of shipments is the received or receivable net selling value, f.o.b. plant (exclusive of freight and taxes), of all products shipped, both primary and secondary, as well as all miscellaneous receipts such as receipts for contract work performed for others, installation and repair, sales of scrap, and sale of products bought and resold without further processing. Included are all items made by the establishment or for it under contract from materials owned by it whether sold, transferred to other plants of the same company, or shipped on consignment. The net selling value of products made in one plant on a contract basis from materials owned by another was reported by the plant providing the materials.

In the case of multiunit companies, the manufacturer was requested to report the value of products transferred to other establishments of the same company at full economic value; i.e., to include not only the direct costs of production but also a reasonable proportion of "all other costs" (including company overhead) and profit.

**Duplication in Cost of Materials and Value of Products**—The aggregate cost of materials and value-of-shipments figures for industry groups and for all manufacturing industries may include large amounts of duplication since the products of some industries are used as materials by others. With some important exceptions, such as motor vehicles and parts, this duplication is not significant within individual industries but arises from the addition of the totals of related industries in successive stages of the production of a finished manufactured product. Examples are the addition of flour mills to bakeries in the food group and the addition of pulp mills to paper mills in the paper and allied products group of industries. Esti-



mates of this duplication indicate that the value of manufactured products exclusive of such duplication—the value of finished manufactures—approximates two-thirds of the total value of products.

Prior to 1962, the Bureau of the Census did not publish figures for cost of materials or value of shipments if they contained significant duplication. Effective with the 1962 annual survey these figures were shown at all industry levels for the United States to meet the requests for their use in studies in which the presence of an indeterminate amount of duplication is not a limiting factor. However, they are appropriately footnoted. Effective with the 1964 annual survey, these industry group totals are also shown at the State, standard metropolitan statistical area, and large-county level.

Even where there is no significant amount of duplication, value-of-shipments figures are deficient as measures of the relative economic importance of individual manufacturing industries or geographic areas because of the wide variation in ratio of materials, labor, and other processing costs to value of shipments among industries.

**Value Added by Manufacture**—This measure of manufacturing activity is derived by subtracting the cost of materials, supplies, containers, fuel, purchased electricity, and cost of resales contract work from the value of shipments for products manufactured plus resales and receipts for services rendered. The result of this calculation is adjusted by the net change in finished goods and work-in-process inventories between the beginning and end of the year. (In the few industries that report value of production rather than value of shipments, only changes in work-in-process inventories are used to adjust value added. In the shipbuilding and repairing industry, no inventory adjustment is made.)

“Value added” avoids the duplication in the value of shipments figure which results from the use of products of some establishments as materials by others. Value added is considered to be the best value measure available for comparing the relative economic importance of manufacturing among industries and geographic areas.

**Expenditures for Plant and Equipment**—Manufacturing establishments in operation and establishments under construction but not yet in operation, were asked to report their expenditures for (a) permanent additions and major alterations to the manufacturing establishment, and (b) new machinery and equipment used for replacement purposes and additions to plant capacity if they are of the type for which depreciation accounts are ordinarily maintained.

These totals exclude expenditures for new facilities and equipment leased from nonmanufacturing concerns; new facilities owned by the Federal Government but operated under contract by private companies; and plant and equipment furnished to the manufacturer by communities and nonprofit organizations. Expenditures for used plant and equipment (although reported in the census), expenditures for land, and cost of maintenance and repairs charged as current operating expense are also omitted from the figures for new capital expenditures.

**Central Administrative Offices and Auxiliary Units**—In the 1972 census as in previous years, respondents were asked to file separate reports for central administrative offices or auxiliary units which were (1) at different locations from the establishments served or, (2) at the same location as one of these establishments but were not operated as an integral part thereof and served two or more establishments. The functions of employees in central administrative offices include general company policy determination, planning and management (that is, company purchasing, accounting, general engineering, direction of company personnel matters, and legal and patent matters). Auxiliaries are storage facilities, garages, repair shops, purchasing offices, sales promotion offices, and research laboratories serving the plants or central management of the company.

**Standard Metropolitan Statistical Areas**—Standard metropolitan statistical areas (SMSA) are integrated economic and social units with a large volume of daily travel and communication between the central city and outlying parts of the area.<sup>1</sup> Each area (except in New England) consists of one whole county or more. An area may contain not only highly industrialized counties but also adjoining counties which, though primarily residential in character, contribute significantly to the industrial counties' labor force and are socially and economically integrated with the central city. These areas are defined by the Federal Committee on Standard Metropolitan Statistical Areas of the Office of Management and Budget for general-purpose use throughout the Federal Government in presenting economic and social data. In the New England States, similar intergration criteria are applied in defining

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<sup>1</sup> Each standard metropolitan statistical area must include either (1) a city with 50,000 or more inhabitants, or (2) a city having a population of at least 25,000 which (a) with the addition of the population of contiguous places has a population density of at least 1,000 persons per square mile; (b) constitutes, for general economic and social purposes, a single community with a combined population of at least 50,000; and (c) includes a total population of at least 75,000 in the county or counties in which the city and contiguous places are located.

SMSA's on a city and town basis because towns rather than counties are regarded as the significant unit in this region of the country.

The requirement that each SMSA consist of county units (except in New England) sometimes results in the inclusion in an area of considerable amount of territory which would not ordinarily be considered "metropolitan," much less "industrial." It is recognized that metropolitan areas could be more accurately defined in terms of smaller area segments such as minor civil

divisions, but the usefulness of areas so defined would be limited by the fact that many types of economic and social data are available only on a county basis.

Each SMSA is designated by the name of the principal city of the area. In addition to the name of the principal city, the area title may include one or two additional city names.

The data for SMSA's which changed definition since the 1967 census have not been retabulated on the new basis for years prior to 1972.







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ed March 1974

U. S. DEPARTMENT OF COMMERCE • Social and Economic Statistics Administration • BUREAU OF THE CENSUS

PRELIMINARY REPORT  
**1972 CENSUS OF  
MANUFACTURES**  
AREA SERIES**Kentucky**

Value added by manufacturing in 1972 in the State of Kentucky amounted to \$5,800 million, a 12-percent increase from 1971 and a 60-percent increase from 1967.

This report presents preliminary results from the 1972 Census of Manufactures for the State, its Standard Metropolitan Statistical Areas, and its counties.

Data are provided for industry groups within the State. Historical data, back to 1958, are included for the State as a whole,

and 1967 figures on employment and value added are provided for the smaller areas.

The figures in this report have been subjected to only preliminary review and must be regarded as approximations of the final census figures. No adjustments have been made in the value figures for changes in price level.

For an explanation of the terms used in the tables, see the appendix at the end of this report.

**TABLE 1. General Statistics for the State: 1972 and Earlier Years**

(See appendix, Explanation of Terms)

Year	Establishments		All employees <sup>1</sup>		Production workers			Value added by manufacture	Cost of materials <sup>2</sup>	Value of shipments <sup>2</sup>	Capital expenditures, new
	Total	With 20 employees or more	Number	Payroll	Number	Man-hours	Wages				
	(number)	(number)	(1,000)	(million dollars)	(1,000)	(millions)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(million dollars)
KENTUCKY											
1972 Census .....	3,169	1,264	261.7	2,180.2	202.1	397.6	1,494.0	5,800.4	6,872.3	12,553.2	380.4
1971 ASM .....	(NA)	(NA)	242.8	1,854.9	187.1	358.0	1,247.4	5,168.2	5,600.9	10,732.2	284.0
1970 ASM .....	(NA)	(NA)	244.8	1,133.9	190.1	367.0	1,177.6	4,491.6	5,174.6	9,595.6	308.6
1969 ASM .....	(NA)	(NA)	244.0	1,633.9	191.1	370.1	1,115.3	4,438.7	4,873.2	9,252.8	335.5
1968 ASM .....	(NA)	(NA)	232.1	1,481.3	182.7	358.8	1,024.2	4,060.7	4,598.9	8,609.8	370.0
1967 Census .....	2,994	1,135	224.6	1,351.9	175.6	344.5	926.7	3,636.0	4,180.5	7,796.0	338.3
1966 ASM .....	(NA)	(NA)	217.9	1,265.6	171.7	346.9	879.1	3,466.2	4,168.6	7,545.5	289.7
1965 ASM .....	(NA)	(NA)	203.0	1,152.4	158.5	320.2	795.2	3,143.3	3,768.3	6,852.0	224.0
1964 ASM .....	(NA)	(NA)	189.4	1,049.5	147.7	297.9	725.9	2,787.0	3,411.0	6,175.6	163.1
1963 Census .....	2,946	1,025	180.5	959.0	140.5	280.4	657.4	2,548.5	(NA)	(NA)	223.6
1962 ASM .....	(NA)	(NA)	175.8	900.2	133.9	263.3	596.2	2,207.0	(NA)	(NA)	140.3
1961 ASM .....	(NA)	(NA)	169.1	839.1	127.4	249.6	549.0	2,025.5	(NA)	(NA)	122.1
1960 ASM .....	(NA)	(NA)	172.6	816.8	132.1	260.0	546.6	1,946.5	(NA)	(NA)	114.3
1959 ASM .....	(NA)	(NA)	173.8	805.9	134.0	265.2	548.2	2,062.9	(NA)	(NA)	102.8
1958 Census .....	2,903	927	162.2	721.4	124.7	241.7	491.8	1,769.3	(NA)	(NA)	112.5

Note: "ASM" data are based on a representative sample of manufacturing establishments canvassed in the Annual Survey of Manufactures. These estimates may differ from the results of a complete canvass of all manufacturing establishments. The standard errors associated with these estimates are published in the annual survey of manufactures volumes for this period. For comparative purposes, the 1972 ASM estimate for the State of Kentucky was 268 thousand employees, and \$5,564 million in value added with corresponding standard error of estimate of 2 and 1.

(NA) Not available.

<sup>1</sup>Includes employment and payroll at central administrative offices and auxiliary units. (For a definition of these units, see appendix.)

<sup>2</sup>The total cost of materials and value of shipments may include extensive duplication arising from shipments between establishments in the same industry classification. (For a more complete explanation, see appendix.)

TABLE 2. General Statistics for the State, Standard Metropolitan Statistical Areas, and Counties: 1972 and 1967

(See appendix, Explanation of Terms)

State, standard metropolitan statistical areas, and counties <sup>1</sup>	1972											1967	
	Establishments		All employees <sup>2</sup>		Production workers			Value added by manufacture	Cost of materials <sup>3</sup>	Value of shipments <sup>3</sup>	Capital expenditures, new	All employees	Value added by manufacture
	Total	With 20 employees or more	Number	Payroll	Number	Man-hours	Wages						
	(number)	(number)	(1,000)	(million dollars)	(1,000)	(million)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(1,000)	(million dollars)
KENTUCKY, TOTAL . . . . .	3 169	1 264	261.7	2 180.2	202.1	397.6	1 494.0	5 800.4	6 872.3	12 553.2	380.4	224.6	3 636.0
STANDARD METROPOLITAN STATISTICAL AREAS <sup>4</sup>													
CINCINNATI . . . . .	2 026	847	157.6	1 607.9	97.6	196.4	852.9	3 593.8	3 090.3	6 657.0	166.8	166.9	2 689.5
PORTION IN OHIO . . . . .	1 806	761	143.6	1 479.4	87.3	175.3	769.3	3 254.4	2 815.5	6 045.6	156.5	154.8	2 477.1
PORTION IN INDIANA . . . . .	29	11	3.9	36.8	3.3	6.7	28.7	159.1	70.9	229.4	3.1	3.4	118.8
PORTION IN KENTUCKY . . . . .	191	75	10.1	91.7	7.0	14.4	54.9	180.3	203.9	382.0	7.2	8.7	93.7
EVANSVILLE . . . . .	381	153	36.0	319.7	26.1	51.8	216.0	900.1	919.1	1 827.8	124.9	34.0	527.1
PORTION IN INDIANA . . . . .	325	128	33.0	299.8	23.9	47.4	203.6	862.7	888.7	1 762.5	(0)	31.0	498.9
PORTION IN KENTUCKY . . . . .	56	25	3.0	19.9	2.2	4.4	12.4	37.4	30.4	65.3	(0)	3.0	28.2
HUNTINGTON-ASHLAND . . . . .	279	116	25.1	247.2	19.0	37.2	175.5	537.5	918.7	1 450.7	20.0	22.7	327.7
PORTION IN OHIO . . . . .	39	16	3.0	31.1	2.5	5.1	24.7	74.9	71.9	145.9	4.5	4.1	75.7
PORTION IN WEST VIRGINIA . . . . .	172	73	14.0	125.7	10.8	20.9	88.8	230.0	338.6	565.2	8.2	14.8	197.9
PORTION IN KENTUCKY . . . . .	68	27	8.1	90.4	5.7	11.2	62.0	232.6	232.6	508.2	7.3	3.8	54.1
LEXINGTON-FAYETTE . . . . .	270	117	25.4	227.6	18.0	35.5	135.9	607.1	629.4	1 226.3	49.7	21.7	414.0
LOUISVILLE . . . . .	997	458	113.0	1 077.4	82.4	170.5	735.7	3 133.8	3 663.0	6 591.9	125.8	109.9	2 082.5
PORTION IN INDIANA . . . . .	147	60	13.8	98.7	10.1	17.9	66.8	289.8	270.0	552.0	9.8	20.1	290.5
PORTION IN KENTUCKY . . . . .	850	398	99.2	978.7	72.3	152.6	668.9	2 844.0	3 393.0	6 039.9	116.0	89.8	1 792.0
OWENSBORO . . . . .	90	30	7.9	63.9	6.2	12.6	44.7	127.7	169.9	297.1	(0)	10.1	116.7
COUNTIES													
ADAIR . . . . .	18	4	.3	1.3	.3	.5	1.1	3.7	3.2	6.7	.3	.2	1.5
ALLEN . . . . .	13	5	.9	4.3	.8	1.5	3.8	7.1	7.8	14.8	.6	.8	4.3
ANDERSON . . . . .	11	7	1.1	8.1	.9	2.0	6.4	21.9	46.2	66.9	4.7	.5	6.7
BARREN . . . . .	37	20	3.5	20.8	2.9	5.8	16.1	36.2	35.8	70.9	8.9	2.3	16.7
BELL . . . . .	33	15	1.3	7.9	1.1	2.2	5.8	17.0	25.5	40.5	1.1	.9	7.9
BOONE . . . . .	34	23	3.8	34.0	2.4	5.0	17.8	72.2	67.8	138.0	2.4	1.4	6.4
BOYD . . . . .	57	24	7.7	86.5	5.4	10.5	59.1	224.0	499.7	722.2	(0)	8.4	151.7
BOYLE . . . . .	27	13	7.1	21.8	2.5	5.4	16.4	123.2	58.1	179.8	2.2	2.2	29.7
CALDWELL . . . . .	16	8	2.4	15.1	1.9	3.5	9.5	53.6	33.7	82.7	2.0	1.4	28.0
CALLOWAY . . . . .	26	5	1.4	10.6	1.2	2.2	8.5	27.9	33.9	61.6	.6	1.0	5.6
CAMPBELL . . . . .	61	17	2.6	25.8	1.9	3.8	17.4	48.3	61.0	109.6	2.3	3.4	40.3
CARROLL . . . . .	10	8	1.3	7.8	.9	1.8	5.5	31.1	46.6	74.8	5.0	1.3	11.8
CARTER . . . . .	18	7	.8	4.0	.7	1.1	3.2	6.8	2.4	9.4	.4	(0)	(0)
CASEY . . . . .	21	1	.6	4.1	.5	1.0	3.2	6.1	1.7	7.5	.5	.3	3.9
CHRISTIAN . . . . .	42	21	3.8	24.4	3.0	6.0	17.3	56.8	74.7	130.1	2.6	2.9	32.8
CLARK . . . . .	25	15	3.7	31.8	3.2	6.3	22.9	80.9	73.6	153.5	6.8	2.1	23.7
CLINTON . . . . .	10	3	.9	3.3	.8	1.6	3.1	9.2	3.8	12.6	.1	(0)	(0)
CRITTENDEN . . . . .	8	3	.7	4.1	.6	1.1	3.4	10.4	4.1	14.3	.3	(0)	(0)
DAVESS . . . . .	90	30	7.9	63.9	6.2	12.6	44.7	127.7	169.9	297.1	(0)	10.1	116.7
FAYETTE . . . . .	179	73	16.5	160.0	10.6	20.8	86.3	424.3	477.1	891.1	39.8	16.0	342.3
FRANKLIN . . . . .	26	14	3.0	20.7	2.6	4.8	16.7	71.0	123.5	198.4	3.1	2.3	54.3
FULTON . . . . .	13	5	.6	3.8	.5	1.0	2.7	7.7	6.8	14.9	1.3	.7	2.7
GRAVES . . . . .	36	9	4.0	29.9	3.3	6.4	23.5	73.2	70.4	145.1	10.1	3.3	48.0
GRAYSON . . . . .	23	9	1.0	5.4	.9	1.7	4.1	13.2	11.5	23.3	1.8	.7	3.9
GREEN . . . . .	14	7	.5	2.4	.4	.9	2.0	6.7	6.1	12.7	.1	.3	1.8
GREENUP . . . . .	11	3	.4	3.9	.3	.7	2.9	8.6	8.5	17.4	(0)	(0)	(0)
HANCOCK . . . . .	13	7	2.4	26.2	1.8	3.7	18.5	49.2	192.5	242.6	1.1	(0)	(0)
HARDIN . . . . .	35	15	2.6	18.1	2.1	4.1	12.7	75.2	38.6	113.1	4.2	2.0	29.7
HARLAN . . . . .	21	5	.4	2.7	.3	.7	1.7	4.8	8.1	13.0	.1	.5	6.4
HARRISON . . . . .	21	12	1.4	9.8	1.1	2.3	7.4	28.2	32.9	62.2	2.9	1.1	13.6
HART . . . . .	13	7	.6	2.8	.5	1.0	2.3	6.6	11.5	18.1	.1	.4	2.7
HENDERSON . . . . .	56	25	3.0	19.9	2.2	4.4	12.4	37.4	30.4	65.3	(0)	3.0	28.2
HENRY . . . . .	11	5	.5	3.2	.5	.9	2.4	10.8	14.0	24.2	.4	(0)	(0)
HOPKINS . . . . .	47	13	2.4	14.5	2.0	3.9	10.8	32.9	42.0	74.5	1.8	1.1	7.4
JEFFERSON . . . . .	831	389	97.8	968.0	71.2	140.7	636.5	2 766.3	3 254.3	6 039.3	114.2	89.8	1 792.0
KENTON . . . . .	96	35	3.7	31.9	2.7	5.6	19.7	59.8	75.1	134.4	2.5	3.6	43.0
KNOX . . . . .	18	7	1.0	5.2	.8	1.6	3.9	10.9	7.3	18.5	2.0	.6	6.0
LARUE . . . . .	10	2	.3	1.5	.3	.6	1.3	2.4	1.5	3.9	.2	.2	2.0
LAUREL . . . . .	25	10	1.2	8.0	1.0	2.1	5.4	10.5	25.9	36.4	.7	.9	7.0
LINCOLN . . . . .	16	3	.7	3.7	.7	1.3	3.3	6.9	8.7	15.3	.2	(0)	(0)
LOGAN . . . . .	32	20	3.1	17.9	2.6	4.9	14.3	53.2	51.4	102.5	2.6	2.4	27.5
MC CRACKEN . . . . .	56	23	4.7	35.4	3.7	6.6	24.4	84.1	46.3	126.3	1.7	4.7	65.0
MADISON . . . . .	28	11	2.8	18.6	2.2	4.1	13.6	41.0	24.0	62.9	3.9	2.0	25.1
MARION . . . . .	14	7	.8	5.0	.7	1.4	4.2	9.1	8.1	16.7	.1	1.0	8.7
MARSHALL . . . . .	18	7	3.3	34.3	2.6	5.5	25.7	124.9	138.6	254.3	9.4	3.0	100.2
MASON . . . . .	19	10	2.3	17.2	1.7	3.6	11.6	44.3	59.1	109.5	2.2	2.5	37.4
MERCER . . . . .	19	7	2.4	17.9	1.9	3.5	12.0	54.4	36.0	87.9	3.3	1.3	13.1
MONROE . . . . .	22	5	.9	4.5	.9	1.6	3.9	7.3	8.0	15.2	.6	.9	4.2
MONTGOMERY . . . . .	19	8	2.6	15.5	2.4	4.6	13.4	34.4	41.3	73.0	1.4	1.6	19.0
MUHLENBERG . . . . .	42	13	.9	4.4	.9	1.6	3.7	10.1	9.9	20.0	.3	.6	3.8
NELSON . . . . .	27	14	1.8	13.6	1.5	2.8	9.7	60.6	46.2	105.5	5.6	1.2	25.6
OHIO . . . . .	28	12	1.1	6.7	1.0	2.0	5.5	17.8	17.6	33.7	.9	.7	5.5
PENDLETON . . . . .	8	4	.6	3.1	.4	.8	1.9	5.2	5.8	11.0	.6	.3	2.6
PIKE . . . . .	35	8	.6	4.6	.5	1.1	3.5	15.9	9.2	25.1	1.2	.2	1.6
PULASKI . . . . .	53	15	2.9	18.1	2.4	4.6	14.0	43.4	45.6	88.1	3.9	1.9	17.4
ROWAN . . . . .	21	6	.6	3.3	.5	1.0	2.6	6.1	8.4	14.4	.5	.7	5.4
RUSSELL . . . . .	17	4	.9	6.6	.8	1.4	4.8	7.9	4.7	12.5	(0)	.1	.9
SCOTT . . . . .	27	13	1.8	11.5	1.5	2.7	8.3	33.4	19.0	52.9	1.2	1.8	14.9
SHELBY . . . . .	27	16	1.2	7.9	.9	1.7	4.9	14.9	20.3	35.3	1.5	1.1	12.0
STIMPSON . . . . .	17	9	2.8	17.1	2.3	4.5	12.1	49.1	38.3	86.4	2.1	2.0	27.1
TAYLOR . . . . .	25	8	3.8	22.2	3.6	6.7	19.8	64.7	41.2	103.3	.9	(0)	(0)
TODD . . . . .	14	5	.5	3.1	.5	.8	2.5	6.8	11.7	18.6	.5	.4	4.6

See footnotes at end of table.



TABLE 2. General Statistics for the State, Standard Metropolitan Statistical Areas, and Counties: 1972 and 1967—Continued

(See appendix, Explanation of Terms)

State, standard metropolitan statistical areas, and counties <sup>1</sup>	1972											1967	
	Establishments		All employees <sup>2</sup>		Production workers			Value added by manu- facture	Cost of materials <sup>3</sup>	Value of shipments <sup>3</sup>	Capital expendi- tures, new	All employees	Value added by manu- facture
	Total	With 20 employees or more	Number	Payroll	Number	Man-hours	Wages						
	(number)	(number)	(1,000)	(million dollars)	(1,000)	(million)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(1,000)	(million dollars)
COUNTIES—CONTINUED													
UNION. . . . .	17	4	0.5	2.3	0.4	0.8	1.8	7.0	3.8	10.7	0.2	0.4	2.9
WARREN . . . . .	60	28	6.7	46.9	5.6	11.0	36.1	109.8	146.8	249.1	4.2	5.1	64.3
WASHINGTON . . . . .	8	5	.6	3.4	.5	1.0	2.4	10.0	23.2	32.9	.6	.7	5.0
WAYNE. . . . .	20	7	.7	2.8	.7	1.2	2.4	7.5	5.7	13.0	.1	.5	3.7
WEBSTER. . . . .	15	2	.3	1.9	.3	.6	1.6	2.7	3.8	6.2	.1	.6	5.7
WHITLEY. . . . .	21	8	1.4	7.6	1.1	2.3	5.5	11.9	17.8	28.6	1.0	.6	4.2
WOODFORD . . . . .	11	7	2.6	19.9	2.2	4.6	15.4	60.1	49.3	109.0	1.5	1.8	33.1

(D) Withheld to avoid disclosing figures for individual companies.

<sup>1</sup>Some counties were withheld from publication in order to (a) avoid disclosing figures for individual companies or (b) permit further checking of the figures for smaller counties. Additional detail will appear in the final report for this State.<sup>2</sup>Includes employment and payroll at central administrative offices and auxiliary units. (For a definition of these units, see appendix.)<sup>3</sup>The total cost of materials and value of shipments may include extensive duplication arising from shipments between establishments in the same industry classification. (For a more complete explanation, see appendix.)<sup>4</sup>The standard metropolitan statistical areas in this State are defined as follows:

CINCINNATI, OH-KY-IN, SMSA: Consists of Clermont, Hamilton, and Warren Counties, OH; Boone, Campbell, and Kenton Counties, KY; and Dearborn County, IN.

EVANSVILLE, IN-KY, SMSA: Consists of Gibson, Posey, Vanderburgh, and Warrick Counties, IN, and Henderson County, KY.

HUNTINGTON-ASHLAND, WV-KY-OH, SMSA: Consists of Cabell and Wayne Counties, WV; Boyd and Greenup Counties, KY; and Lawrence County, OH.

LEXINGTON SMSA: Consists of Bourbon, Clark, Fayette, Jessamine, Scott, Woodford Counties, KY.

LOUISVILLE, KY-IN, SMSA: Consists of Bullitt, Jefferson, and Oldham Counties, KY, and Clark and Floyd Counties, IN.

OWENSBORO SMSA: Coextensive with Daviess County, KY.

TABLE 3. General Statistics for the State, by Industry Groups and Industries: 1972 and 1967

(See appendix, Explanation of Terms)

Code	Industry	1972											1967	
		Establishments		All employees		Production workers			Value added by manufacture	Cost of materials <sup>1</sup>	Value of shipments <sup>1</sup>	Capital expenditures, 1967	All employees	Value added by manufacture
		Total	With 20 employees or more	Number	Payroll	Number	Man-hours	Wages						
		(number)	(number)	(1,000)	(million dollars)	(1,000)	(million)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(1,000)	(million dollars)
	ALL INDUSTRIES, TOTAL <sup>2</sup> . . . .	3 169	1 264	261.7	2 180.2	202.1	397.6	1 494.0	5 800.4	6 872.3	12 553.2	380.4	224.6	3 630.0
20	FOOD AND KINDRED PRODUCTS. . . .	387	193	22.0	186.9	14.2	29.1	111.4	707.1	1 110.4	1 815.7	37.2	23.0	513.3
201	MEAT PRODUCTS. . . . .	72	17	3.1	27.4	2.3	5.0	19.9	57.0	228.6	284.8	3.5	3.1	37.7
2011	MEATPACKING PLANTS . . . . .	55	13	2.7	26.0	2.0	4.5	18.9	53.3	219.1	271.5	3.3	2.5	35.2
202	DAIRY PRODUCTS . . . . .	71	45	3.1	24.0	1.5	3.1	10.3	54.9	180.5	236.4	3.7	3.6	50.6
2022	CHEESE, NATURAL AND PROCESSED. . . .	10	10	.4	2.3	.3	.5	1.6	7.1	24.4	31.5	.8	.5	3.8
2026	FLUID MILK . . . . .	43	25	2.0	16.4	.7	1.5	5.1	33.2	92.5	125.6	2.2	2.4	31.7
203	PRESERVED FRUITS AND VEGETABLES. .	10	6	.6	4.2	.4	.8	2.4	10.1	16.0	26.1	1.1	(NA)	(NA)
204	GRAIN MILL PRODUCTS. . . . .	44	14	.8	6.1	.6	1.2	3.7	20.9	70.1	91.1	1.0	.8	17.6
205	BAKERY PRODUCTS. . . . .	31	15	2.5	22.1	1.6	3.3	11.3	43.0	44.9	87.9	1.6	2.7	31.1
207	FATS AND OILS. . . . .	7	4	.6	6.0	.4	1.0	3.7	19.3	149.0	168.3	.4	(NA)	(NA)
208	BEVERAGES. . . . .	98	76	9.7	86.2	6.3	12.7	53.2	466.1	342.2	807.1	21.2	10.5	338.8
2086	BOTTLED AND CANNED SOFT DRINKS . .	59	41	3.1	23.6	1.1	2.4	6.8	56.9	76.9	133.5	11.6	2.7	34.6
209	MISC. FOODS AND KINDRED PRODUCTS .	41	13	1.4	10.5	.9	1.9	6.5	34.9	78.1	111.7	4.6	(NA)	(NA)
2095	FOOD PREPARATIONS, NEC . . . . .	24	11	.9	7.1	.6	1.2	4.2	23.2	40.1	62.2	2.3	.7	12.7
2111	CIGARETTES . . . . .	3	3	9.5	85.5	8.5	16.5	74.5	464.4	321.2	785.5	14.5	8.3	358.0
22	TEXTILE MILL PRODUCTS. . . . .	22	16	3.2	18.7	2.7	5.5	14.7	45.3	104.4	149.6	2.8	5.9	42.6
225	KNITTING MILLS . . . . .	6	4	.8	4.7	.6	1.2	2.8	10.5	13.4	22.9	.3	4.7	34.4
23	APPAREL, OTHER TEXTILE PRODUCTS	151	110	29.9	150.1	27.7	52.1	131.0	299.9	185.3	480.6	6.1	23.1	139.9
2311	MEN'S AND BOYS' SUITS AND COATS. . .	13	12	4.3	25.2	3.9	7.3	22.3	56.5	21.0	77.9	.7	4.8	32.1
232	MEN'S AND BOYS' FURNISHINGS. . . .	66	63	19.5	92.0	18.5	35.1	83.6	190.8	123.0	308.3	3.1	13.2	74.0
2321	MEN'S AND BOYS' SHIRTS AND NIGHTWEAR	11	11	3.2	15.2	2.9	5.8	12.8	29.9	22.9	51.2	.4	2.5	17.5
2328	MEN'S AND BOYS' WORK CLOTHING. . . .	24	26	6.2	27.1	5.8	11.3	24.9	48.5	46.3	92.3	.9	5.6	26.2
233	WOMEN'S, AND MISSES' OUTERWEAR . .	20	14	2.9	16.8	2.5	4.5	13.2	23.9	5.5	29.0	1.1	2.1	10.8
239	MISC. FABRICATED TEXTILE PRODUCTS .	40	11	2.1	11.8	1.7	3.5	8.5	21.0	28.3	48.0	.7	1.9	14.6
2392	HOUSE FURNISHINGS, NEC . . . . .	10	5	.8	4.1	.7	1.3	3.0	8.6	13.1	21.5	.2	CC	(D)
24	LUMBER AND WOOD PRODUCTS . . . .	549	105	9.2	55.4	8.0	16.1	46.2	117.5	137.9	254.5	6.1	(NA)	(NA)
242	SAWMILLS AND PLANING MILLS . . . .	289	45	4.0	24.6	3.6	7.4	20.0	53.1	52.6	106.0	2.8	4.9	34.6
2421	SAWMILLS AND PLANING MILLS, GENERAL	241	29	2.1	11.8	1.9	3.7	9.8	31.3	30.5	62.4	1.8	2.7	19.5
2426	HARDWOOD DIMENSION AND FLOORING. . .	30	15	1.8	12.0	1.6	3.5	9.6	20.4	20.3	40.6	(D)	(NA)	(NA)
243	MILLWORK, PLYWOOD, STRUC. MEMBERS	42	14	1.3	8.5	1.0	2.0	6.2	17.3	26.2	42.9	.7	(NA)	(NA)
2431	MILLWORK . . . . .	15	6	.5	3.3	.4	.7	2.4	6.6	5.2	11.7	.2	(NA)	(NA)
2435	HARDWOOD VENEER AND PLYWOOD. . . . .	7	4	.6	3.4	.5	1.0	2.6	7.9	17.9	25.1	.4	(NA)	(NA)
2444	WOOD PALLETS AND SKIDS . . . . .	24	15	1.0	4.1	.8	1.3	3.5	7.3	8.2	15.5	(D)	(NA)	(NA)
2449	WOOD CONTAINERS, NEC . . . . .	9	6	.8	6.2	.6	1.2	5.1	15.1	17.8	32.2	.2	(NA)	(NA)
249	MISCELLANEOUS WOOD PRODUCTS. . . .	61	12	1.0	5.7	.9	1.6	4.4	11.4	14.0	25.6	.7	(NA)	(NA)
2499	WOOD PRODUCTS, NEC . . . . .	50	9	.7	3.7	.6	1.0	2.8	6.7	8.3	15.1	.3	(NA)	(NA)
25	FURNITURE AND FIXTURES . . . . .	89	46	5.8	36.3	4.8	9.1	26.0	61.0	76.6	136.1	2.3	6.1	47.1
251	HOUSEHOLD FURNITURE . . . . .	61	29	4.4	26.7	3.6	7.0	18.8	45.1	59.0	103.2	1.8	(NA)	(NA)
2511	WOOD HOUSEHOLD FURNITURE . . . . .	25	10	1.5	9.6	1.2	2.4	7.0	10.1	18.2	28.4	.7	(NA)	(NA)
2512	UPHOLSTERED HOUSEHOLD FURNITURE. . .	15	6	.7	4.1	.6	1.0	3.0	7.6	5.9	13.4	.5	(NA)	(NA)
252	OFFICE FURNITURE . . . . .	6	6	.7	5.3	.6	1.0	4.0	8.2	7.4	15.1	.2	(NA)	(NA)
26	PAPER AND ALLIED PRODUCTS. . . .	46	43	5.8	47.6	4.5	9.0	33.9	107.1	143.3	248.9	9.0	4.6	64.5
265	PAPERBOARD CONTAINERS AND BOXES. . .	28	25	2.8	23.0	2.2	4.4	16.8	53.5	62.5	114.4	4.6	2.2	32.5
2653	CORRUGATED AND SOLID FIBER BOXES . .	12	10	1.1	10.2	.8	1.7	7.0	15.8	26.2	41.8	1.0	1.1	11.1
2654	SANITARY FOOD CONTAINERS . . . . .	6	5	1.1	8.7	1.0	2.0	6.9	29.5	26.4	55.1	2.8	CC	(D)
27	PRINTING AND PUBLISHING. . . . .	411	86	12.8	104.5	9.2	17.7	68.2	255.5	120.7	373.7	13.2	10.5	113.6
2711	NEWSPAPERS . . . . .	155	28	3.6	30.0	1.8	3.3	12.5	61.0	23.0	84.0	2.7	3.2	37.4
2721	PERIODICALS. . . . .	20	4	.3	1.9	.1	.2	.6	3.2	2.2	5.4	.1	.2	2.3
275	COMMERCIAL PRINTING. . . . .	188	43	5.7	51.2	4.6	8.5	38.2	85.3	43.8	128.5	6.8	(NA)	(NA)
2751	COMMERCIAL PRINTING, LETTERPRESS . .	114	13	3.2	29.8	2.7	4.7	24.3	47.3	22.1	69.3	1.3	(NA)	(NA)
2752	COMMERCIAL PRINTING, LITHOGRAPHIC . .	64	25	2.3	19.4	1.6	3.4	12.1	34.4	20.5	54.5	5.4	(NA)	(NA)
2753	ENGRAVING AND PLATE PRINTING . . . .	10	5	.3	2.1	.2	.4	1.7	3.6	1.2	4.7	.1	(NA)	(NA)
28	CHEMICALS AND ALLIED PRODUCTS. .	122	63	12.8	135.2	8.6	17.6	82.5	487.6	544.0	1 025.3	36.6	13.3	391.6
282	PLASTICS MATERIALS AND SYNTHETICS. .	10	9	4.5	52.1	3.3	6.3	33.9	191.8	169.3	356.5	(D)	(NA)	(NA)
2851	PAINTS AND ALLIED PRODUCTS . . . . .	23	18	2.1	22.0	1.2	2.8	10.2	97.8	76.3	173.5	4.0	2.1	52.7
286	INDUSTRIAL ORGANIC CHEMICALS . . . .	9	8	2.7	29.2	2.0	4.1	20.3	101.2	138.7	238.9	7.8	(NA)	(NA)
287	AGRICULTURAL CHEMICALS . . . . .	24	13	.5	3.0	.3	.6	1.5	8.6	19.0	27.0	(D)	(NA)	(NA)
2875	FERTILIZERS, MIXING ONLY . . . . .	16	6	.3	1.6	.2	.4	.9	4.4	13.9	17.7	(D)	.3	3.2
30	RUBBER AND MISC. PLASTICS PROD . .	60	28	6.4	52.2	5.1	10.2	37.6	160.2	120.8	277.2	17.3	(NA)	(NA)
3079	MISCELLANEOUS PLASTICS PRODUCTS. . .	49	20	2.8	21.1	2.2	4.4	14.1	56.4	53.1	107.5	5.9	(NA)	(NA)
31	LEATHER AND LEATHER PRODUCTS . .	24	18	5.0	26.3	4.6	9.1	23.3	56.7	51.4	106.9	1.2	FF	(D)
32	STONE, CLAY, AND GLASS PRODUCTS. .	226	71	8.2	68.4	6.4	12.8	49.0	184.1	104.4	285.8	24.6	6.2	82.9
325	STRUCTURAL CLAY PRODUCTS . . . . .	20	16	1.4	10.6	1.2	2.5	8.4	21.0	11.4	32.2	5.8	1.4	12.3
3255	CLAY REFRACTORIES. . . . .	5	5	.3	2.3	.2	.4	1.8	3.5	2.9	6.8	.3	CC	(D)
326	POTTERY AND RELATED PRODUCTS . . .	14	6	.7	4.2	.7	1.3	3.5	8.7	3.6	12.1	.3	BB	(D)
327	CONCRETE, GYPSUM, PLASTER PRODUCTS	161	32	1.9	15.0	1.3	2.6	9.2	33.8	36.6	69.9	4.2	1.9	24.9
3271	CONCRETE BLOCK AND BRICK . . . . .	35	7	.5	3.4	.3	.6	1.9	7.8	7.7	15.4	.7	BB	(D)

See footnotes at end of table.



TABLE 3. General Statistics for the State, by Industry Groups and Industries: 1972 and 1967—Continued

(See appendix, Explanation of Terms)

Code	Industry	1972											1967	
		Establishments		All employees		Production workers			Value added by manufacture	Cost of materials <sup>1</sup>	Value of shipments <sup>1</sup>	Capital expenditures, new	All employees	Value added by manufacture
		Total	With 20 employees or more	Number	Payroll	Number	Man-hours	Wages						
		(number)	(number)	(1,000)	(million dollars)	(1,000)	(million)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(1,000)	(million dollars)
3272	CONCRETE PRODUCTS, NEC . . . . .	39	7	0.5	2.9	0.4	0.7	2.1	7.5	4.4	11.6	0.7	88	(D)
3273	READY-MIXED CONCRETE . . . . .	87	14	1.0	8.7	.7	1.3	5.2	18.5	24.5	42.9	2.8	1.0	14.9
329	MISC. NONMETALLIC MINERAL PRODUCTS	17	10	2.0	18.1	1.5	3.0	12.2	57.1	29.6	85.3	1.4	(NA)	(NA)
33	PRIMARY METAL INDUSTRIES . . . . .	62	44	14.0	150.2	11.2	22.6	114.0	365.1	694.4	1 048.7	86.0	13.1	215.6
331	BLAST FURNACE, BASIC STEEL PROD. . .	15	13	8.0	96.1	6.6	13.3	75.5	233.2	260.6	486.3	(D)	8.8	155.0
3312	BLAST FURNACES AND STEEL MILLS . . .	7	6	6.1	78.6	5.0	9.9	61.0	175.6	194.5	369.2	2.8	FF	(D)
335	NONFERROUS ROLLING AND DRAWING . .	16	13	2.9	25.7	2.3	4.6	19.2	76.6	228.7	305.3	1.4	2.9	42.2
3357	NONFERROUS WIRE DRAWING, INSULATING	6	5	1.2	8.7	1.0	2.0	6.7	29.3	60.6	89.2	.4	1.1	5.6
336	NONFERROUS FOUNDRIES . . . . .	9	5	1.1	8.3	.8	1.7	5.7	15.6	15.2	30.7	(D)	.8	7.1
34	FABRICATED METAL PRODUCTS. . . . .	260	132	18.9	154.5	15.1	30.7	110.1	323.3	323.2	640.2	13.4	(NA)	(NA)
342	CUTLERY, HANDTOOLS AND HARDWARE . .	13	10	1.3	9.3	1.0	2.0	6.3	10.8	18.1	26.5	1.4	CC	(D)
343	PLUMBING, HEATING, EXC. ELECTRIC. . .	9	7	2.2	18.8	1.7	3.6	13.5	47.5	30.7	77.4	.5	(NA)	(NA)
344	FABRICATED STRUCTURAL METAL PROD. .	107	36	3.4	28.2	2.6	5.3	18.4	51.9	55.5	105.9	1.4	3.0	33.5
3443	FABRICATED PLATEWORK (BOILERS SHOP) .	20	8	.6	6.4	.4	1.0	3.8	10.8	10.6	21.4	.4	.7	8.0
3444	SHEET METALWORK. . . . .	22	7	.4	4.6	.3	.5	3.0	9.0	9.5	17.2	.2	CC	(D)
346	METAL FORGINGS AND STAMPINGS . . .	33	22	2.4	19.0	2.0	4.1	14.2	29.5	28.4	58.9	2.7	(NA)	(NA)
3469	METAL STAMPINGS, NEC . . . . .	27	17	1.8	14.4	1.4	2.9	10.6	22.4	22.7	46.6	2.2	(NA)	(NA)
347	METAL SERVICES, NEC. . . . .	30	11	.7	4.2	.6	1.1	3.1	7.5	3.8	11.3	(D)	.6	5.5
3471	PLATING AND POLISHING. . . . .	21	7	.4	2.5	.3	.6	1.9	4.7	2.2	6.9	(D)	.2	1.7
3479	METAL COATING AND ALLIED SERVICES. .	4	4	.3	1.7	.3	.5	1.2	2.8	1.6	4.4	(D)	.5	3.8
349	MISC. FABRICATED METAL PRODUCTS. .	53	34	8.0	66.6	6.4	12.5	47.7	151.1	158.3	307.6	6.0	(NA)	(NA)
3494	VALVES AND PIPE FITTINGS . . . . .	4	4	2.6	23.1	1.9	3.5	15.4	48.1	37.2	83.7	1.0	2.9	39.3
3495	WIRE SPRINGS . . . . .	5	5	1.3	9.3	1.1	2.3	6.9	22.0	19.7	41.9	1.0	(NA)	(NA)
3498	FABRICATED PIPE AND FITTINGS . . . .	4	4	.4	3.6	.3	.6	2.5	7.4	3.6	9.7	(D)	AA	(D)
35	MACHINERY, EXCEPT ELECTRICAL. . .	316	99	32.2	322.9	24.1	46.7	212.5	685.9	615.4	1 288.8	55.4	22.5	467.5
353	CONSTRUCTION AND RELATED MACHINERY	32	16	2.5	23.6	1.6	3.2	12.4	45.8	41.8	87.7	1.4	1.6	20.0
3535	CONVEYORS AND CONVEYING EQUIPMENT. .	10	5	1.3	13.9	.7	1.5	6.3	24.8	20.4	45.1	.5	.9	12.8
3544	SPECIAL DIES, TOOLS, JIGS, FIXTURES	50	10	.6	4.7	.5	1.0	3.6	8.1	3.6	11.7	.6	88	(D)
3550	SPECIAL INDUSTRY MACHINERY, NEC. . .	17	4	.7	6.4	.5	.8	3.9	7.7	9.8	17.3	.3	.7	10.0
356	GENERAL INDUSTRIAL MACHINERY . . .	22	15	3.6	33.2	2.6	5.1	21.5	79.6	80.2	165.1	6.2	2.9	56.1
358	REFRIGERATION, SERVICE MACHINERY. .	19	14	9.2	77.7	7.6	14.5	58.8	171.0	194.3	362.4	11.5	FF	(D)
359	MISC. MACHINERY, EXCEPT ELECTRICAL	176	10	3.3	25.7	2.8	5.5	21.0	51.5	37.2	85.1	1.3	(NA)	(NA)
36	ELECTRIC, ELECTRONIC EQUIPMENT. . .	87	59	34.3	277.9	28.7	54.8	208.5	823.4	634.4	1 430.4	26.8	(NA)	(NA)
361	ELECTRIC DISTRIBUTING EQUIPMENT. . .	12	10	4.9	36.3	4.0	7.5	27.1	87.4	55.8	141.4	3.0	(NA)	(NA)
362	ELECTRICAL INDUSTRIAL APPARATUS. . .	8	6	2.7	18.5	2.4	4.3	14.8	46.6	39.6	84.0	2.6	3.5	48.9
364	ELECT. LIGHTING AND WIRING EQUIP. .	14	16	4.0	27.5	3.3	6.3	20.5	88.1	62.1	148.3	2.4	3.2	57.8
369	MISC. ELECTRICAL EQUIP., SUPPLIES	11	4	1.3	10.9	1.2	2.4	7.9	14.5	22.0	35.8	.8	.5	5.0
38	INSTRUMENTS AND RELATED PRODUCTS	31	12	4.0	26.6	3.3	6.8	18.7	75.0	46.9	122.2	2.7	(NA)	(NA)
39	MISC. MANUFACTURING INDUSTRIES . .	103	35	4.6	29.3	3.7	7.3	20.1	66.5	48.4	112.0	4.8	3.3	33.3
394	TOYS AND SPORTING GOODS. . . . .	20	10	1.8	12.6	1.5	3.0	8.9	28.0	19.2	46.3	1.3	1.0	14.4
3944	GAMES, TOYS, AND CHILDREN'S VEHICLES	5	3	.3	2.1	.3	.6	1.4	4.6	3.6	8.3	.8	(NA)	(NA)
3949	SPORTING AND ATHLETIC GOODS, NEC . .	11	7	1.4	10.3	1.2	2.4	7.3	22.9	15.1	36.9	.5	CC	(D)
395	PENS, PENCILS, OFFICE, ART GOODS . .	14	4	.4	2.2	.3	.6	1.5	7.0	6.1	11.9	(D)	88	(D)
399	MISCELLANEOUS MANUFACTURES . . . .	61	18	2.0	11.2	1.5	2.8	7.2	22.3	17.5	39.2	1.1	1.8	11.5
3993	SIGNS AND ADVERTISING DISPLAYS . . .	36	6	.6	4.0	.4	.8	2.5	7.1	5.3	12.2	.6	.5	4.2
3999	MANUFACTURING INDUSTRIES, NEC. . . .	10	8	1.0	4.8	.8	1.5	3.0	10.2	6.5	16.3	.3	CC	(D)
--	ADMINISTRATIVE AND AUXILIARY . . .	97	48	9.4	105.4	-	-	-	-	-	-	-	7.0	-

Note: The following symbols indicate employment size range for 1967:

AA less than 250 employees

EE 1,000 to 2,499 employees

BB 250 to 499 employees

FF 2,500 employees and over

CC 500 to 999 employees

- Represents zero. (NA) Not available. Because of a revision to this industry or industry group in the 1972 edition of the SIC manual, 1967 census data are not available on a comparable basis. (D) Withheld to avoid disclosing figures for individual companies.

<sup>1</sup>The total cost of materials and value of shipments for industry groups shown may include extensive duplication arising from shipments between establishments in the same industry classification. (For a more complete explanation, see appendix.)

<sup>2</sup>Includes figures for industry groups which have been withheld from publication in order to (a) avoid disclosing figures for individual companies or (b) permit further checking of figures for smaller industry groups. Additional detail will appear in the final report for this State.

## Appendix A. SCOPE AND COVERAGE

This report is one of a series presenting preliminary information, by State, from the 1972 Census of Manufactures. The data will be superseded in a final report which, in turn, will be included in *Volume III, Area Statistics, 1972 Census of Manufactures*. The final report will include a comprehensive discussion of the concepts and definitions used in the census.

The census of manufactures covers each manufacturing establishment in the United States with one paid employee or more; manufacturing establishments with no employees are excluded. Firms which operated more than one establishment were required to file a separate report for each location. Companies which engaged in distinctly different lines of activity at one location were asked to submit separate reports if the company records permitted such a separation and the activities were of significant size.

This report includes figures for administrative offices, warehouses, garages, or other auxiliary units which service manufacturing establishments.

In the 1972 census, the approximately 120,000 manufacturing establishments with fewer than 10 employees were excused from filing reports. Under special arrangements which safeguarded the confidentiality of both tax and census records, data on payrolls, sales, and industry classification from the administrative records of the Social Security Administration and the Internal Revenue Service were made available to the Census Bureau for use in the 1972 Economic Censuses (retail and wholesale trade, service industries, construction industries, manufactures, and mineral industries). Estimates for data other than payrolls and sales for these small establishments were constructed from industry averages. The effect on industry aggregates is slight in most industries. For manufacturing as a whole, these small establishments account for less than 3 percent of the payrolls and value added.

Establishments are classified by industry in accordance with industry definitions described in the 1972 edition of the Standard Industrial Classification (SIC) Manual. For 1972, the SIC was significantly revised and the comparability with prior year's data for some industries was significantly affected. The comparability at the 2- and 3-digit SIC levels was less affected. The final volumes of the 1972 Census of Manufactures will contain a table relating aggregates based on the 1972 SIC with aggregates derived from classifying establishments according to the 1967 SIC definitions.

As in earlier censuses, a number of small establishments may have been misclassified as to industry. However, such possible misclassifications have significant effect on *none* of the statistics except the number of establishments. As indicated above, report forms were not mailed to very small establishments (fewer than 10 employees). The industry classifications for these establishments were assigned on the basis of brief descriptions of the general activity of the establishment. Where the description is incomplete or there are relatively fine lines of demarcation among industries or between manufacturing and nonmanufacturing activity, the code assigned to an establishment could differ from that which would have been assigned on the basis of more complete product information. Therefore, the total establishment count for individual industries should be viewed as an approximation rather than a precise measurement. The counts for establishments with 20 employees or more are more reliable than the total number of establishments.

More detailed figures for this State will appear in the final census reports. Final reports will also include a comprehensive discussion of such concepts as "industry" and "establishment," as well as the various statistical items such as "employment," "value of shipments," and "value added." Similar preliminary and final reports will be issued for other States during the coming months. A series of preliminary summary reports showing U.S. totals for each manufacturing industry and for each State are being issued. Final industry reports and final area reports will be published during 1974.

Order forms describing the individual reports and listing their prices may be obtained from any U.S. Department of Commerce district office or from the Publications Distribution Section, Social and Economic Statistics Administration, Washington, D.C. 20233.

The 1972 Census of Manufactures is the 29th census of manufacturing establishments in the United States. For 1972, it was conducted jointly with the censuses of mineral industries, construction industries, retail trade, wholesale trade, and selected services under authority of Title 13 of the United States Code. Title 13 specifies that a census of manufactures be conducted every 5 years and, as amended, to cover years ending in "2" and "7". Title 13 also authorizes an annual sample survey of manufacturing establishments in interim years.



## Appendix B. EXPLANATION OF TERMS

*(For a more complete discussion of these terms and the method of compiling the Census of Manufactures, see the "Introduction" to the 1967 Census of Manufactures, Volume III).*

**All Employees**—All full-time and part-time employees on the payrolls of operating manufacturing establishments for any part of the pay period ending nearest the 12th of the months specified on the report form. Included are all persons on paid sick leave, paid holidays, and paid vacations during these pay periods. Officers of corporations are included as employees; proprietors and partners of unincorporated firms are excluded. The "all employee" number is the average number of production workers for the midmonth payroll period of March, May, August, and November plus the number of nonproduction employees in mid-March.

**Number of Production Workers**—Workers (up through the working foreman level) engaged in fabricating, processing, assembling, inspecting, receiving, packing, warehousing, shipping (but not delivering), and maintenance, repair, janitorial, and watchman services, product development, auxiliary production for plant's own use (e.g., powerplant), recordkeeping, and other closely associated services. Proprietors and partners are excluded.

**Payroll**—This item includes all forms of compensation such as salaries, wages, commissions, dismissal pay, bonuses, vacation and sick leave pay, and compensation in kind, prior to such deductions as employees' Social Security contributions, withholding taxes, group insurance, union dues, and savings bonds. The total includes salaries of officers of these establishments, if a corporation; it excludes payments to the proprietor or partners, if an unincorporated concern. Respondents were told that in reporting they could follow the definition of payrolls used for calculating the Federal withholding tax.

**Man-Hours of Production Workers**—This total relates to production-worker man-hours worked or paid for at the plant including actual overtime hours (not straight-time equivalent hours). It excludes hours paid for vacation, holidays, or sick leave when the employee was not at the plant.

**Cost of Materials**—The term "Cost of Materials" refers to charges actually paid or payable for items consumed or put into production during the year, including freight and other direct charges incurred by the establishment in acquiring these materials. It includes the cost of materials or fuel consumed regardless of

whether these items were purchased by the establishment from other companies, transferred to it from other establishments of the same company, or withdrawn from inventory during the year. The establishment was requested to value materials transferred from other parts of the company at its approximate market value, not at cost of production. The important components of this cost item are (a) all raw materials, semifinished goods, parts, components, containers, scrap, and supplies put into production or used as operating supplies and for repair and maintenance during the year; (b) electric energy purchased; (c) fuels consumed for heat, power, or the generation of electricity; (d) work done by others on materials or parts furnished by manufacturing establishments (contract work); and (e) products bought and resold in the same condition.

**Value of Shipments**—The value of shipments is the received or receivable net selling value, f.o.b. plant (exclusive of freight and taxes), of all products shipped, both primary and secondary, as well as all miscellaneous receipts such as receipts for contract work performed for others, installation and repair, sales of scrap, and sale of products bought and resold without further processing. Included are all items made by the establishment or for it under contract from materials owned by it whether sold, transferred to other plants of the same company, or shipped on consignment. The net selling value of products made in one plant on a contract basis from materials owned by another was reported by the plant providing the materials.

In the case of multiunit companies, the manufacturer was requested to report the value of products transferred to other establishments of the same company at full economic value; i.e., to include not only the direct costs of production but also a reasonable proportion of "all other costs" (including company overhead) and profit.

**Duplication in Cost of Materials and Value of Products**—The aggregate cost of materials and value-of-shipments figures for industry groups and for all manufacturing industries may include large amounts of duplication since the products of some industries are used as materials by others. With some important exceptions, such as motor vehicles and parts, this duplication is not significant within individual industries but arises from the addition of the totals of related industries in successive stages of the production of a finished manufactured product. Examples are the addition of flour mills to bakeries in the food group and the addition of pulp mills to paper mills in the paper and allied products group of industries. Esti-



mates of this duplication indicate that the value of manufactured products exclusive of such duplication—the value of finished manufactures—approximates two-thirds of the total value of products.

Prior to 1962, the Bureau of the Census did not publish figures for cost of materials or value of shipments if they contained significant duplication. Effective with the 1962 annual survey these figures were shown at all industry levels for the United States to meet the requests for their use in studies in which the presence of an indeterminate amount of duplication is not a limiting factor. However, they are appropriately footnoted. Effective with the 1964 annual survey, these industry group totals are also shown at the State, standard metropolitan statistical area, and large-county level.

Even where there is no significant amount of duplication, value-of-shipments figures are deficient as measures of the relative economic importance of individual manufacturing industries or geographic areas because of the wide variation in ratio of materials, labor, and other processing costs to value of shipments among industries.

**Value Added by Manufacture**—This measure of manufacturing activity is derived by subtracting the cost of materials, supplies, containers, fuel, purchased electricity, and cost of resale contract work from the value of shipments for products manufactured plus resales and receipts for services rendered. The result of this calculation is adjusted by the net change in finished goods and work-in-process inventories between the beginning and end of the year. (In the few industries that report value of production rather than value of shipments, only changes in work-in-process inventories are used to adjust value added. In the shipbuilding and repairing industry, no inventory adjustment is made.)

“Value added” avoids the duplication in the value of shipments figure which results from the use of products of some establishments as materials by others. Value added is considered to be the best value measure available for comparing the relative economic importance of manufacturing among industries and geographic areas.

**Expenditures for Plant and Equipment**—Manufacturing establishments in operation and establishments under construction but not yet in operation, were asked to report their expenditures for (a) permanent additions and major alterations to the manufacturing establishment, and (b) new machinery and equipment used for replacement purposes and additions to plant capacity if they are of the type for which depreciation accounts are ordinarily maintained.

These totals exclude expenditures for new facilities and equipment leased from nonmanufacturing concerns; new facilities owned by the Federal Government but operated under contract by private companies; and plant and equipment furnished to the manufacturer by communities and nonprofit organizations. Expenditures for used plant and equipment (although reported in the census), expenditures for land, and cost of maintenance and repairs charged as current operating expense are also omitted from the figures for new capital expenditures.

**Central Administrative Offices and Auxiliary Units**—In the 1972 census as in previous years, respondents were asked to file separate reports for central administrative offices or auxiliary units which were (1) at different locations from the establishments served or, (2) at the same location as one of these establishments but were not operated as an integral part thereof and served two or more establishments. The functions of employees in central administrative offices include general company policy determination, planning and management (that is, company purchasing, accounting, general engineering, direction of company personnel matters, and legal and patent matters). Auxiliaries are storage facilities, garages, repair shops, purchasing offices, sales promotion offices, and research laboratories serving the plants or central management of the company.

**Standard Metropolitan Statistical Areas**—Standard metropolitan statistical areas (SMSA) are integrated economic and social units with a large volume of daily travel and communication between the central city and outlying parts of the area.<sup>1</sup> Each area (except in New England) consists of one whole county or more. An area may contain not only highly industrialized counties but also adjoining counties which, though primarily residential in character, contribute significantly to the industrial counties' labor force and are socially and economically integrated with the central city. These areas are defined by the Federal Committee on Standard Metropolitan Statistical Areas of the Office of Management and Budget for general-purpose use throughout the Federal Government in presenting economic and social data. In the New England States, similar intergration criteria are applied in defining

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<sup>1</sup> Each standard metropolitan statistical area must include either (1) a city with 50,000 or more inhabitants, or (2) a city having a population of at least 25,000 which (a) with the addition of the population of contiguous places has a population density of at least 1,000 persons per square mile; (b) constitutes, for general economic and social purposes, a single community with a combined population of at least 50,000; and (c) includes a total population of at least 75,000 in the county or counties in which the city and contiguous places are located.



SMSA's on a city and town basis because towns rather than counties are regarded as the significant unit in this region of the country.

The requirement that each SMSA consist of county units (except in New England) sometimes results in the inclusion in an area of considerable amount of territory which would not ordinarily be considered "metropolitan," much less "industrial." It is recognized that metropolitan areas could be more accurately defined in terms of smaller area segments such as minor civil

divisions, but the usefulness of areas so defined would be limited by the fact that many types of economic and social data are available only on a county basis.

Each SMSA is designated by the name of the principal city of the area. In addition to the name of the principal city, the area title may include one or two additional city names.

The data for SMSA's which changed definition since the 1967 census have not been retabulated on the new basis for years prior to 1972.



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## PRELIMINARY REPORT

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## AREA SERIES

72(P)-S19

U. S. DEPARTMENT OF COMMERCE • Social and Economic Statistics Administration • BUREAU OF THE CENSUS

March 1974

**Louisiana**

Value added by manufacturing in 1972 in the State of Louisiana amounted to \$4,381 million, a 25-percent increase from 1971 and a 57-percent increase from 1967.

This report presents preliminary results from the 1972 Census of Manufactures for the State, its Standard Metropolitan Statistical Areas, and its counties.

Data are provided for industry groups within the State. Historical data, back to 1958, are included for the State as a whole,

and 1967 figures on employment and value added are provided for the smaller areas.

The figures in this report have been subjected to only preliminary review and must be regarded as approximations of the final census figures. No adjustments have been made in the value figures for changes in price level.

For an explanation of the terms used in the tables, see the appendix at the end of this report.

**TABLE 1. General Statistics for the State: 1972 and Earlier Years**

(See appendix, Explanation of Terms)

Year	Establishments		All employees <sup>1</sup>		Production workers			Value added by manufacture	Cost of materials <sup>2</sup>	Value of shipments <sup>2</sup>	Capital expenditures, new
	Total	With 20 employees or more	Number	Payroll	Number	Man-hours	Wages				
	(number)	(number)	(1,000)	(million dollars)	(1,000)	(millions)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(million dollars)
LOUISIANA											
1972 Census . . . . .	3,646	1,146	181.2	1,619.7	135.0	277.6	1,081.6	4,380.7	7,077.1	11,487.2	578.1
1971 ASM . . . . .	(NA)	(NA)	161.0	1,347.0	119.4	246.6	898.4	3,504.5	5,840.5	9,334.2	536.5
1970 ASM . . . . .	(NA)	(NA)	167.9	1,287.7	125.4	258.1	865.3	3,364.7	5,507.9	8,838.2	470.6
1969 ASM . . . . .	(NA)	(NA)	173.3	1,265.5	129.0	264.1	839.7	3,250.3	5,342.8	8,587.3	561.1
1968 ASM . . . . .	(NA)	(NA)	169.6	1,189.7	124.9	262.2	793.5	3,045.3	4,998.2	8,037.3	607.6
1967 Census . . . . .	3,639	1,016	164.5	1,084.4	120.8	250.6	712.2	2,790.3	4,536.5	7,275.2	741.4
1966 ASM . . . . .	(NA)	(NA)	151.6	939.3	112.3	232.3	618.6	2,530.6	4,017.6	6,509.1	487.5
1965 ASM . . . . .	(NA)	(NA)	147.6	873.3	109.3	226.7	573.8	2,250.7	3,706.8	5,954.3	314.3
1964 ASM . . . . .	(NA)	(NA)	145.8	857.7	105.0	219.5	534.6	2,147.2	3,480.2	5,645.1	230.2
1963 Census . . . . .	3,222	954	139.5	769.4	104.7	215.4	526.2	1,915.6	(NA)	(NA)	210.8
1962 ASM . . . . .	(NA)	(NA)	130.4	677.2	98.4	202.8	461.2	1,647.4	(NA)	(NA)	147.2
1961 ASM . . . . .	(NA)	(NA)	129.0	650.9	97.0	199.6	442.2	1,592.0	(NA)	(NA)	165.6
1960 ASM . . . . .	(NA)	(NA)	133.3	562.9	100.4	205.2	441.5	1,573.8	(NA)	(NA)	138.9
1959 ASM . . . . .	(NA)	(NA)	135.4	646.5	103.6	212.1	440.3	1,566.7	(NA)	(NA)	140.1
1958 Census . . . . .	3,156	935	136.9	621.4	103.5	205.9	426.3	1,429.6	(NA)	(NA)	173.4

Note: "ASM" data are based on a representative sample of manufacturing establishments canvassed in the Annual Survey of Manufactures. These estimates may differ from the results of a complete canvass of all manufacturing establishments. The standard errors associated with these estimates are published in the annual survey of manufactures volumes for this period. For comparative purposes, the 1972 ASM estimate for the State of Louisiana was 161 thousand employees, and \$4,032 million in value added with corresponding standard error of estimate of 2 and 1.

(NA) Not available.

<sup>1</sup>Includes employment and payroll at central administrative offices and auxiliary units. (For a definition of these units, see appendix.)

<sup>2</sup>The total cost of materials and value of shipments may include extensive duplication arising from shipments between establishments in the same industry classification. (For a more complete explanation, see appendix.)

TABLE 2. General Statistics for the State, Standard Metropolitan Statistical Areas, and Counties: 1972 and 1967

(See appendix, Explanation of Terms)

State, standard metropolitan statistical areas, and counties <sup>1</sup>	1972										1967		
	Establishments		All employees <sup>2</sup>		Production workers			Value added by manu- facture	Cost of materials <sup>3</sup>	Value of shipments <sup>3</sup>	Capital expendi- tures, new	All employees	Value added by manu- facture
	Total	With 20 employees or more	Number	Payroll	Number	Man-hours	Wages						
	(number)	(number)	(1,000)	(million dollars)	(1,000)	(million)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(1,000)	(million dollars)
LOUISIANA, TOTAL . . . . .	3 646	1 146	181.2	1 619.7	135.0	277.6	1 081.6	4 380.7	7 077.1	11 487.2	578.1	164.5	2 790.3
STANDARD METROPOLITAN STATISTICAL AREAS <sup>4</sup>													
ALEXANDRIA . . . . .	136	30	4.2	30.3	3.1	6.4	13.6	89.5	107.9	198.0	6.5	(NA)	(NA)
BATON ROUGE . . . . .	318	112	22.9	278.9	15.3	31.7	164.2	781.8	1 450.4	2 232.7	167.2	16.1	455.3
LAFAYETTE . . . . .	94	25	2.6	18.5	1.5	3.1	8.8	42.2	48.3	88.8	2.6	2.0	23.0
LAKE CHARLES . . . . .	102	40	9.6	106.9	6.6	13.4	70.8	368.5	853.8	1 228.5	22.2	8.2	183.8
MONROE . . . . .	150	42	6.4	56.8	4.6	9.4	36.5	125.7	157.0	282.7	9.8	6.2	94.2
NEW ORLEANS . . . . .	934	352	53.9	476.6	38.7	78.5	304.8	1 000.8	1 295.6	2 308.8	73.6	(NA)	(NA)
SHREVEPORT . . . . .	381	128	23.5	187.3	18.1	37.3	132.2	441.3	515.2	960.9	21.4	23.1	291.5
PARISHES													
ACADIA . . . . .	57	16	1.3	6.6	1.1	2.1	4.9	16.4	58.8	75.3	1.0	1.3	14.9
ALLEN . . . . .	23	8	1.9	13.8	1.7	3.5	11.2	31.0	41.6	73.8	3.3	1.8	18.9
ASCENSION . . . . .	39	19	4.8	59.8	3.5	7.6	40.7	220.7	265.8	483.7	35.8	1.9	77.9
ASSUMPTION . . . . .	10	6	.6	4.9	.4	1.1	3.6	11.0	36.3	46.7	.8	.7	8.6
AVOYELLES . . . . .	29	6	.5	2.7	.4	1.1	2.3	8.0	9.6	17.9	.6	.3	2.7
BEAUREGARD . . . . .	35	5	.9	8.1	.6	1.2	6.2	25.6	40.0	65.3	1.9	.4	4.3
BIENVILLE . . . . .	42	7	1.0	5.0	.9	1.7	3.8	9.7	17.8	27.1	.6	.9	5.7
BOSSIER . . . . .	68	20	1.9	11.5	1.6	3.3	8.8	31.0	49.9	81.1	1.7	1.2	14.7
CADDO . . . . .	224	90	18.3	146.9	13.8	28.5	101.3	335.9	355.4	695.3	16.8	11.7	149.8
CALCASIEU . . . . .	102	40	9.6	106.9	6.6	13.4	70.8	368.5	853.8	1 228.5	22.2	8.2	183.8
CALDWELL . . . . .	26	2	.3	2.0	.3	.5	1.5	4.4	6.4	10.7	.5	.1	.5
CLAIBORNE . . . . .	53	6	.7	4.0	.6	1.2	3.3	10.6	23.4	34.1	.4	.6	5.9
CONCORDIA . . . . .	16	7	.4	1.8	.3	.7	1.5	2.6	3.0	5.6	.2	.3	1.7
DE SOTO . . . . .	36	3	1.4	8.8	1.2	2.4	6.8	20.5	27.8	48.1	2.7	1.3	11.4
EAST BATON ROUGE . . . . .	232	81	17.5	214.0	11.2	22.9	119.5	545.9	1 161.3	1 710.2	130.4	16.1	455.3
EVANGELINE . . . . .	18	3	.4	2.4	.3	.6	2.0	8.8	8.0	16.6	(D)	(D)	(D)
FRANKLIN . . . . .	7	2	.5	2.2	.4	.9	1.8	3.3	3.0	6.2	.3	.4	2.3
IBERIA . . . . .	62	24	2.2	13.4	1.4	2.9	7.6	36.8	33.2	65.3	1.4	2.0	20.2
IBERVILLE . . . . .	31	12	2.2	26.2	1.3	2.8	14.2	253.9	113.8	367.1	26.1	(D)	(D)
JEFFERSON . . . . .	276	116	20.4	182.8	16.2	35.1	138.6	348.7	387.0	732.5	21.2	15.9	243.7
JEFFERSON DAVIS . . . . .	26	3	.7	4.5	.6	1.3	3.6	7.5	7.6	15.1	.4	.5	5.5
LAFAYETTE . . . . .	94	25	2.6	18.5	1.5	3.1	8.8	42.2	48.3	88.8	2.6	2.0	23.0
LAFOURCHE . . . . .	62	26	2.2	15.7	1.7	3.6	11.4	32.2	74.1	106.5	3.6	1.7	21.4
LA SALLE . . . . .	32	8	1.2	7.8	1.1	2.5	6.8	24.2	24.7	46.8	1.3	.6	5.7
LINCOLN . . . . .	47	14	1.1	7.8	.9	1.8	5.8	18.8	23.5	42.3	3.9	.7	7.1
LIVINGSTON . . . . .	37	5	.3	2.3	.3	.6	1.9	4.7	5.4	10.1	.4	.4	3.5
NATCHITOCHES . . . . .	42	5	.4	2.3	.3	.6	1.6	4.1	7.6	11.7	1.7	.5	3.7
ORLEANS . . . . .	576	208	27.5	236.3	17.6	34.2	121.7	526.4	534.8	1 077.5	25.7	33.8	464.2
OUACHITA . . . . .	150	42	6.4	56.8	4.6	9.4	36.5	125.7	157.0	282.7	9.8	6.2	94.2
RICHLAND . . . . .	12	4	.7	3.6	.6	1.3	2.7	6.3	12.5	20.0	.6	.4	3.6
SABINE . . . . .	53	6	1.0	7.0	.8	1.8	5.6	15.1	17.9	33.2	6.0	.7	5.3
ST. BERNARD . . . . .	31	12	4.2	44.1	3.3	6.1	32.9	104.3	349.5	453.1	24.1	4.2	137.1
ST. CHARLES . . . . .	22	12	3.6	46.1	2.4	5.2	28.4	270.5	527.4	803.2	47.4	2.2	116.5
ST. JAMES . . . . .	23	14	2.7	32.4	2.0	4.4	22.9	94.9	474.3	598.8	15.5	1.6	35.5
ST. LANDRY . . . . .	44	12	1.1	6.3	.9	1.9	4.4	14.0	42.1	56.8	1.4	.9	7.9
ST. MARTIN . . . . .	21	12	1.2	5.5	1.1	2.1	5.0	8.5	18.7	26.9	1.8	.6	4.4
ST. MARY . . . . .	76	34	4.5	39.3	3.7	8.3	31.8	100.9	80.4	165.2	9.9	3.7	52.6
ST. TAMMANY . . . . .	51	16	1.8	13.4	1.6	3.1	11.6	21.4	24.3	45.7	2.6	(NA)	(NA)
TANGIPAHOA . . . . .	105	26	2.6	14.6	2.3	4.5	11.3	38.6	42.6	81.0	2.5	1.8	16.4
TENSAS . . . . .	6	3	.3	1.9	.2	.5	1.5	4.2	8.0	12.1	.3	(D)	(D)
TERRERONNE . . . . .	70	28	3.7	29.6	3.1	6.9	23.5	59.3	67.3	127.1	5.4	2.6	30.6
UNION . . . . .	57	6	.9	4.1	.8	1.6	3.4	8.9	11.2	20.0	.7	.5	4.0
VERMILION . . . . .	36	6	.7	3.6	.5	1.0	2.6	18.4	36.8	54.5	1.1	.8	12.8
WASHINGTON . . . . .	51	12	3.4	30.3	2.9	5.5	23.6	64.0	108.9	171.4	6.1	3.7	48.9
WEBSTER . . . . .	89	18	3.3	28.9	2.7	5.5	22.1	74.4	109.9	184.5	2.9	10.2	127.5
WEST BATON ROUGE . . . . .	10	7	.3	2.8	.3	.6	2.1	10.5	17.9	28.7	.6	.3	2.8
WEST CARROLL . . . . .	6	3	.3	1.2	.3	.5	1.0	3.0	2.4	5.1	.1	.2	1.4
WINN . . . . .	57	7	1.4	8.8	1.2	2.5	7.3	19.5	30.9	50.7	1.3	1.5	12.7

- Represents zero. (X) Not applicable. (NA) Not available. (D) Withheld to avoid disclosing figures for individual companies.

<sup>1</sup>Some counties were withheld from publication in order to (a) avoid disclosing figures for individual companies or (b) permit further checking of the figures for smaller counties. Additional detail will appear in the final report for this State.<sup>2</sup>Includes employment and payroll at central administrative offices and auxiliary units. (For a definition of these units, see appendix.)<sup>3</sup>The total cost of materials and value of shipments may include extensive duplication arising from shipments between establishments in the same industry classification. (For a more complete explanation, see appendix.)<sup>4</sup>The standard metropolitan statistical areas in this State are defined as follows:

ALEXANDRIA SMSA: Consists of Grant and Rapides Parishes, LA.

BATON ROUGE SMSA: Consists of Ascension, East Baton Rouge, Livingston, and West Baton Rouge Parishes, LA.

LAFAYETTE SMSA: Coextensive with Lafayette Parish, LA.

LAKE CHARLES SMSA: Coextensive with Calcasieu Parish, LA.

MONROE SMSA: Coextensive with Ouachita Parish, LA.

NEW ORLEANS SMSA: Consists of Jefferson, Orleans, St. Bernard, and St. Tammany Parishes, LA.

SHREVEPORT SMSA: Consists of Bossier, Caddo, and Webster Parishes, LA.



TABLE 3. General Statistics for the State, by Industry Groups and Industries: 1972 and 1967

(See appendix: Explanation of Terms)

Code	Industry	1972										1967		
		Establishments		All employees		Production workers			Value added by manufacture	Cost of materials <sup>1</sup>	Value of shipments <sup>1</sup>	Capital expenditures, new	All employees	Value added by manufacture
		Total	With 20 employees or more	Number	Payroll	Number	Man-hours	Wages						
		(number)	(number)	(1,000)	(million dollars)	(1,000)	(million)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(1,000)	(million dollars)
	ALL INDUSTRIES, TOTAL . . . . .	3 640	1 140	181.2	1 619.7	135.0	277.4	1 011.5	340.7	7 077.1	11 487.2	578.1	164.5	2 757.3
20	FOOD AND KINDRED PRODUCTS . . . . .	581	234	28.7	202.1	18.9	40.0	113.7	584.3	1 374.0	1 973.4	40.9	29.6	455.0
201	MEAT PRODUCTS . . . . .	91	31	3.5	20.9	2.8	5.5	14.9	45.3	152.8	197.4	2.6	3.1	30.6
2011	MEATPACKING PLANTS . . . . .	7	14	1.0	6.8	.7	1.4	4.5	10.6	55.0	65.4	1.2	.9	13.8
2013	SAUSAGES AND OTHER PREPARED MEATS . . . . .	1	-	.7	5.7	.5	1.0	3.3	12.7	30.7	43.0	.7	.5	5.4
2014	POULTRY DRESSING PLANTS . . . . .	11	-	1.8	4.3	1.6	3.1	7.1	22.0	67.0	88.9	.7	NA	NA
202	DAIRY PRODUCTS . . . . .	5	34	2.9	22.4	1.1	2.2	5.3	57.6	154.5	211.7	4.5	2.9	42.5
2026	FLUID MILK . . . . .	4	2	2.5	19.8	.9	1.8	5.8	52.9	146.3	198.7	4.4	2.4	35.0
203	PRESERVED FRUITS AND VEGETABLES . . . . .	24	1	2.5	12.2	2.1	4.4	4.3	31.4	37.3	68.7	1.6	NA	NA
2033	CANNED FRUITS AND VEGETABLES . . . . .	13	-	1.5	6.9	1.3	3.0	2.0	14.9	22.3	37.2	1.0	1.7	11.5
204	GRAIN MILL PRODUCTS . . . . .	47	-	1.5	8.5	1.2	2.5	5.8	36.6	138.0	175.6	1.3	1.7	30.3
205	BAKERY PRODUCTS . . . . .	4	2	3.9	31.1	2.0	4.5	12.4	56.2	41.6	97.7	3.1	3.8	46.2
206	SUGAR AND CONFECTIONERY PRODUCTS . . . . .	56	40	5.1	42.6	4.1	10.0	33.6	114.2	413.5	522.6	14.3	NA	NA
207	FATS AND OILS . . . . .	20	15	1.1	8.0	.9	2.1	6.0	23.5	109.1	133.8	4.0	NA	NA
2077	ANIMAL AND MARINE FATS AND OILS . . . . .	1	-	.5	3.2	.4	1.0	2.7	12.7	9.2	21.5	1.0	.6	6.0
2079	SHORTENING AND COOKING OILS . . . . .	3	-	.4	3.5	.3	.7	2.3	6.7	69.1	77.4	2.0	88	(D)
208	BEVERAGES . . . . .	41	40	4.5	35.5	1.8	3.8	11.9	113.7	131.1	264.3	5.2	FF	(D)
2086	BOTTLED AND CANNED SOFT DRINKS . . . . .	4	34	3.1	23.5	1.0	2.1	5.0	47.5	74.1	121.3	4.5	3.0	37.4
209	MISC. FOODS AND KINDRED PRODUCTS . . . . .	144	52	3.7	20.8	2.9	5.1	14.0	105.9	196.0	301.7	4.2	NA	NA
2090	FOOD PREPARATIONS, NEC . . . . .	34	12	.7	4.4	.5	.8	2.5	16.8	13.4	29.8	1.6	.8	11.2
22	TEXTILE MILL PRODUCTS . . . . .	11	0	1.3	4.9	1.1	2.1	5.7	13.7	30.3	44.3	2.6	88	(D)
23	APPAREL, OTHER TEXTILE PRODUCTS . . . . .	24	50	6.9	43.4	7.8	14.0	30.3	66.8	66.0	131.3	3.7	7.0	44.4
2311	MEN'S AND BOYS' SUITS AND COATS . . . . .	-	0	1.4	8.8	1.3	2.2	6.2	13.3	9.7	21.8	.2	EE	(D)
232	MEN'S AND BOYS' FURNISHINGS . . . . .	23	21	4.9	23.5	4.4	7.8	15.9	38.2	29.3	67.4	2.3	3.4	21.5
2321	MEN'S AND BOYS' SHIRTS AND NIGHTWEAR . . . . .	0	5	.9	3.1	.8	1.7	2.9	4.3	3.1	7.6	.3	88	(D)
2322	MEN'S AND BOYS' WORK CLOTHING . . . . .	7	7	1.4	5.5	1.4	2.2	4.5	8.6	9.3	17.6	(D)	EE	(D)
233	WOMEN'S, AND MISSES' OUTERWEAR . . . . .	11	0	.5	1.8	.4	.7	1.3	2.0	4.8	6.7	.1	NA	NA
238	MISC. APPAREL AND ACCESSORIES . . . . .	7	3	.3	1.0	.2	.4	.8	1.7	1.4	3.1	(Z)	88	(D)
239	MISC. FABRICATED TEXTILE PRODUCTS . . . . .	32	10	1.1	5.2	.9	1.7	3.6	6.7	17.3	24.0	1.2	1.3	9.9
2393	TEXTILE BAGS . . . . .	-	-	.5	2.6	.5	.9	2.0	3.0	11.8	14.8	1.0	1.0	8.0
24	LUMBER AND WOOD PRODUCTS . . . . .	920	142	14.6	89.5	12.8	25.6	71.3	206.1	262.0	469.1	22.5	NA	NA
2411	LOGGING CAMPS, LOGGING CONTRACTORS . . . . .	60	10	2.4	13.3	2.2	4.0	10.9	33.7	29.3	62.9	4.6	2.1	20.2
242	SAWMILLS AND PLANING MILLS . . . . .	161	43	5.8	34.0	5.2	10.8	28.2	71.5	88.9	161.4	8.5	7.2	45.6
2421	SAWMILLS AND PLANING MILLS, GENERAL . . . . .	150	-	5.2	30.7	4.7	9.8	25.6	65.7	85.1	151.7	8.2	FF	(D)
243	MILLWORK, FLYWOOD, STRUC. MEMBERS . . . . .	74	30	3.4	24.8	2.9	6.6	19.8	64.1	79.3	143.4	5.9	NA	NA
2431	MILLWORK . . . . .	34	9	.6	3.9	.5	1.0	2.7	8.1	11.5	19.5	.3	NA	NA
2436	SOFTWOOD VENEER AND PLYWOOD . . . . .	10	1	2.2	16.9	2.0	4.6	14.5	50.9	51.2	102.2	5.2	NA	NA
244	WOOD CONTAINERS . . . . .	1	-	.4	1.9	.4	.5	1.5	3.7	4.1	7.7	.8	NA	NA
2448	WOOD PALLETS AND SKIDS . . . . .	-	-	.3	1.1	.2	.3	.9	2.3	2.7	5.0	(D)	NA	NA
245	WOOD BUILDINGS AND MOBILE HOMES . . . . .	10	10	1.2	6.9	1.0	1.4	4.7	12.2	27.7	39.7	.8	NA	NA
249	MISCELLANEOUS WOOD PRODUCTS . . . . .	54	21	1.3	8.6	1.1	2.2	6.2	20.9	32.7	54.0	2.0	NA	NA
2499	WOOD PRODUCTS, NEC . . . . .	34	7	.5	3.1	.4	.8	2.2	9.9	12.0	22.2	.5	NA	NA
25	FURNITURE AND FIXTURES . . . . .	64	14	1.5	7.5	1.2	2.4	6.0	15.4	13.9	29.2	.5	1.4	10.4
251	HOUSEHOLD FURNITURE . . . . .	39	11	1.2	6.0	1.0	2.0	4.8	12.6	11.1	23.6	.5	NA	NA
26	PAPER AND ALLIED PRODUCTS . . . . .	61	53	15.6	162.6	12.4	27.1	127.3	400.2	422.4	885.5	(D)	14.5	254.0
2621	PAPERMILLS, EXCEPT BUILDING PAPER . . . . .	7	-	3.8	43.1	3.2	6.7	34.6	111.6	117.3	230.4	11.0	3.8	74.1
2631	PAPERBOARD MILLS . . . . .	-	7	5.2	59.8	4.3	9.1	47.7	157.6	175.4	333.3	10.4	4.8	107.0
264	MISC. CONVERTED PAPER PRODUCTS . . . . .	24	17	3.1	25.2	2.5	5.0	18.9	51.5	97.2	148.8	2.6	2.8	30.8
2643	BAGS, EXCEPT TEXTILE BAGS . . . . .	14	12	2.6	21.9	2.2	4.2	16.4	42.9	81.3	124.2	(D)	2.4	25.1
265	PAPERBOARD CONTAINERS AND BOXES . . . . .	24	17	2.2	19.9	1.8	3.6	14.0	41.5	63.0	102.7	1.3	EE	(D)
2653	CORRUGATED AND SOLID FIBER BOXES . . . . .	11	10	1.6	14.6	1.3	2.6	10.3	27.4	43.6	70.0	.7	1.5	18.9
27	PRINTING AND PUBLISHING . . . . .	470	80	7.4	55.6	4.6	8.8	32.6	126.5	57.5	184.8	4.9	5.8	73.5
2711	NEWSPAPERS . . . . .	147	34	4.2	31.7	2.1	4.1	16.5	77.6	27.6	105.1	2.1	3.5	48.8
275	COMMERCIAL PRINTING . . . . .	247	33	2.4	18.2	1.9	3.6	12.3	35.2	24.3	60.4	2.2	NA	NA
2751	COMMERCIAL PRINTING, LETTERPRESS . . . . .	157	14	1.3	9.4	1.0	2.0	6.5	19.1	11.7	31.7	1.4	NA	NA
281	INDUSTRIAL INORGANIC CHEMICALS . . . . .	41	20	4.9	60.2	3.5	7.0	41.0	196.6	207.4	402.0	34.7	NA	NA
2813	INDUSTRIAL GASES . . . . .	10	0	.5	4.7	.2	.5	2.4	33.9	11.8	44.3	11.3	.2	5.4
282	PLASTICS MATERIALS AND SYNTHETICS . . . . .	14	10	3.7	43.8	2.7	5.5	30.5	184.8	191.6	373.3	10.6	NA	NA
2821	PLASTICS MATERIALS AND RESINS . . . . .	-	-	1.6	22.6	1.3	2.7	15.1	110.0	101.7	208.9	6.5	NA	NA
2822	SYNTHETIC RUBBER . . . . .	-	-	1.9	21.2	1.4	2.9	15.4	74.8	89.9	164.4	4.0	EE	(D)
287	AGRICULTURAL CHEMICALS . . . . .	2	11	2.4	28.9	1.6	3.4	18.5	222.4	152.4	405.1	19.9	NA	NA
2873	NITROGENOUS FERTILIZERS . . . . .	-	-	1.4	17.5	1.0	2.1	12.0	90.0	52.4	144.5	13.7	NA	NA
289	MISCELLANEOUS CHEMICAL PRODUCTS . . . . .	44	14	1.6	16.2	1.3	3.0	12.6	57.5	50.7	108.2	5.4	NA	NA
2895	CARBON BLACK . . . . .	-	-	1.1	12.0	.9	2.2	9.9	44.4	28.7	74.3	3.8	1.0	33.0
2899	CHEMICAL PREPARATIONS, NEC . . . . .	20	-	.4	2.5	.3	.6	1.9	5.4	11.8	17.3	.9	NA	NA

See footnotes at end of table.

TABLE 3. General Statistics for the State, by Industry Groups and Industries: 1972 and 1967—Continued

(See appendix, Explanation of Terms)

Code	Industry	1972											1967	
		Establishments		All employees		Production workers			Value added by manufacture	Cost of materials <sup>1</sup>	Value of shipments <sup>1</sup>	Capital expenditures, new	All employees	Value added by manufacture
		Total	With 20 employees or more	Number	Payroll	Number	Man-hours	Wages	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(1,000)	(million dollars)
		(number)	(number)	(1,000)	(million dollars)	(1,000)	(million)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(1,000)	(million dollars)
29	PETROLEUM AND COAL PRODUCTS. . .	52	35	9.5	121.8	6.1	12.9	71.2	442.3	2 468.3	2 917.2	179.8	9.9	345.5
2911	PETROLEUM REFINING . . . . .	27	24	8.5	112.2	5.4	11.3	65.1	408.7	2 397.2	2 813.4	178.7	9.0	326.9
295	PAVING AND ROOFING MATERIALS . . . .	17	7	.5	5.3	.4	1.0	3.6	15.0	17.1	31.9	.5	.6	8.5
2952	ASPHALT FELTS AND COATINGS . . . . .	5	5	.4	4.3	.3	.8	2.9	12.8	14.1	26.8	.1	.4	6.4
299	MISC. PETROLEUM AND COAL PRODUCTS.	14	4	.4	4.3	.3	.6	2.5	18.7	54.0	71.9	.6	(NA)	(NA)
30	RUBBER AND MISC. PLASTICS PROD .	36	9	.8	6.2	.7	1.4	3.9	18.2	23.3	41.3	1.0	(NA)	(NA)
32	STONE, CLAY, AND GLASS PRODUCTS.	221	74	6.8	55.5	5.3	10.9	40.1	144.5	164.3	308.7	18.9	7.3	104.9
3241	CEMENT, HYDRAULIC. . . . .	4	4	.7	6.1	.5	1.1	4.5	15.1	20.8	36.0	(D)	.6	13.7
325	STRUCTURAL CLAY PRODUCTS . . . . .	11	7	.3	1.8	.3	.5	1.3	3.5	1.8	5.4	.2	.3	1.9
327	CONCRETE, GYPSUM, PLASTER PRODUCTS	171	50	3.8	29.6	2.8	5.8	19.9	84.2	107.5	191.6	7.8	3.7	50.3
3272	CONCRETE PRODUCTS, NEC . . . . .	67	17	1.4	11.0	1.2	2.4	8.3	19.9	21.8	41.5	.9	1.6	20.5
3273	READY-MIXED CONCRETE . . . . .	92	28	1.9	14.8	1.3	2.6	8.9	52.0	74.4	126.3	6.1	1.8	23.8
329	MISC. NONMETALLIC MINERAL PRODUCTS	20	8	.8	6.5	.6	1.3	5.0	15.5	20.2	35.7	.6	(NA)	(NA)
332	IRON AND STEEL FOUNDRIES . . . . .	7	7	1.4	11.3	1.2	2.5	9.2	19.0	11.5	30.4	.5	1.1	7.4
34	FABRICATED METAL PRODUCTS. . . . .	194	71	12.8	114.0	10.1	22.1	83.4	257.1	219.5	463.5	9.6	(NA)	(NA)
344	FABRICATED STRUCTURAL METAL PROD .	124	47	6.4	57.4	5.0	10.8	41.8	107.1	118.8	209.9	(D)	6.5	76.0
3441	FABRICATED STRUCTURAL METAL PRODUCTS	32	21	2.9	25.2	2.4	5.1	20.6	58.2	52.8	95.7	(D)	3.0	33.5
3442	METAL DOORS, SASH, AND TRIM. . . . .	4	5	.4	3.0	.3	.6	1.8	6.0	6.0	11.7	(D)	.4	4.4
3444	SHEET METALWORK. . . . .	44	6	.5	4.2	.4	.7	2.5	7.6	13.3	21.5	(D)	.4	4.9
349	MISC. FABRICATED METAL PRODUCTS. .	29	6	1.2	10.2	.8	1.8	6.7	19.3	14.0	33.1	.7	(NA)	(NA)
35	MACHINERY, EXCEPT ELECTRICAL. .	292	72	7.1	60.6	5.3	10.6	39.9	123.2	81.1	202.3	8.6	5.1	61.8
352	FARM AND GARDEN MACHINERY. . . . .	17	7	.6	4.9	.4	.9	2.8	8.9	15.4	23.8	.2	(NA)	(NA)
353	CONSTRUCTION AND RELATED MACHINERY	43	17	2.4	22.6	1.8	3.6	14.9	44.8	23.6	67.8	5.3	EE	(D)
355	SPECIAL INDUSTRY MACHINERY . . . . .	15	4	.7	5.9	.6	1.2	3.9	14.3	9.3	23.6	.7	BB	(D)
356	GENERAL INDUSTRIAL MACHINERY . . . .	22	7	.7	5.3	.4	.9	3.2	10.2	9.0	18.9	.4	.3	4.8
358	REFRIGERATION, SERVICE MACHINERY .	10	5	.6	5.1	.4	.9	3.0	11.1	10.5	20.9	.2	.4	5.5
359	MISC. MACHINERY, EXCEPT ELECTRICAL	172	30	1.9	16.2	1.5	3.1	11.8	37.6	15.1	52.7	1.8	(NA)	(NA)
36	ELECTRIC, ELECTRONIC EQUIPMENT .	44	14	7.0	58.9	5.8	11.3	44.2	146.0	162.1	303.6	6.6	(NA)	(NA)
37	TRANSPORTATION EQUIPMENT . . . . .	169	71	21.9	204.8	17.5	36.9	147.0	286.0	197.4	482.7	14.5	(NA)	(NA)
371	MOTOR VEHICLES AND EQUIPMENT . . . .	24	5	.6	4.6	.5	.9	3.2	9.0	8.8	17.6	.3	CC	(D)
373	SHIP, BOAT BUILDING, REPAIRING . . .	127	52	18.7	166.5	16.4	34.7	139.0	225.4	181.4	406.9	14.1	13.0	136.1
3731	SHIP BUILDING AND REPAIRING. . . . .	55	44	16.9	155.5	14.8	31.9	130.4	206.6	165.0	371.6	12.7	12.0	128.5
3732	BOAT BUILDING AND REPAIRING. . . . .	71	14	1.8	11.0	1.5	2.8	8.6	18.8	16.4	35.4	1.4	1.0	7.6
38	INSTRUMENTS AND RELATED PRODUCTS	23	5	.4	3.5	.2	.5	1.5	8.0	2.7	10.7	.2	(NA)	(NA)
39	MISC. MANUFACTURING INDUSTRIES .	95	15	1.6	9.5	1.2	2.3	6.5	18.6	18.2	37.6	.7	1.4	11.2
394	TOYS AND SPORTING GOODS. . . . .	24	5	.7	3.8	.6	1.1	2.8	7.9	10.6	18.9	.3	.5	3.6
3949	SPORTING AND ATHLETIC GOODS, NEC . .	10	5	.6	3.6	.5	1.0	2.6	7.5	10.2	18.1	.3	BB	(D)
3993	SIGNS AND ADVERTISING DISPLAYS . . .	24	4	.3	2.2	.2	.4	1.6	4.0	1.9	5.8	(D)	.2	2.4
—	ADMINISTRATIVE AND AUXILIARY . . .	50	22	2.8	29.9	—	—	—	—	—	—	—	1.8	—

Note: The following symbols indicate employment size range for 1967:

AA less than 250 employees      EE 1,000 to 2,499 employees  
BB 250 to 499 employees      FF 2,500 employees and over  
CC 500 to 999 employees

— Represents zero.      NA) Not available. Because of a revision to this industry group in the 1972 edition of the SIC manual, 1967 census data are not available on a comparable basis.      (D) Withheld to avoid disclosing figures for individual companies.

<sup>1</sup>The total cost of materials and value of shipments for industry groups shown may include extensive duplication arising from shipments between establishments in the same industry classification. (For a more complete explanation, see appendix.)

<sup>2</sup>Includes figures for industry groups which have been withheld from publication in order to (a) avoid disclosing figures for individual companies or (b) permit further checking of figures for smaller industry groups. Additional detail will appear in the final report for this State.



## Appendix A. SCOPE AND COVERAGE

This report is one of a series presenting preliminary information, by State, from the 1972 Census of Manufactures. The data will be superseded in a final report which, in turn, will be included in *Volume III, Area Statistics, 1972 Census of Manufactures*. The final report will include a comprehensive discussion of the concepts and definitions used in the census.

The census of manufactures covers each manufacturing establishment in the United States with one paid employee or more; manufacturing establishments with no employees are excluded. Firms which operated more than one establishment were required to file a separate report for each location. Companies which engaged in distinctly different lines of activity at one location were asked to submit separate reports if the company records permitted such a separation and the activities were of significant size.

This report includes figures for administrative offices, warehouses, garages, or other auxiliary units which service manufacturing establishments.

In the 1972 census, the approximately 120,000 manufacturing establishments with fewer than 10 employees were excused from filing reports. Under special arrangements which safeguarded the confidentiality of both tax and census records, data on payrolls, sales, and industry classification from the administrative records of the Social Security Administration and the Internal Revenue Service were made available to the Census Bureau for use in the 1972 Economic Censuses (retail and wholesale trade, service industries, construction industries, manufactures, and mineral industries). Estimates for data other than payrolls and sales for these small establishments were constructed from industry averages. The effect on industry aggregates is slight in most industries. For manufacturing as a whole, these small establishments account for less than 3 percent of the payrolls and value added.

Establishments are classified by industry in accordance with industry definitions described in the 1972 edition of the Standard Industrial Classification (SIC) Manual. For 1972, the SIC was significantly revised and the comparability with prior year's data for some industries was significantly affected. The comparability at the 2- and 3-digit SIC levels was less affected. The final volumes of the 1972 Census of Manufactures will contain a table relating aggregates based on the 1972 SIC with aggregates derived from classifying establishments according to the 1967 SIC definitions.

As in earlier censuses, a number of small establishments may have been misclassified as to industry. However, such possible misclassifications have significant effect on *none* of the statistics except the number of establishments. As indicated above, report forms were not mailed to very small establishments (fewer than 10 employees). The industry classifications for these establishments were assigned on the basis of brief descriptions of the general activity of the establishment. Where the description is incomplete or there are relatively fine lines of demarcation among industries or between manufacturing and nonmanufacturing activity, the code assigned to an establishment could differ from that which would have been assigned on the basis of more complete product information. Therefore, the total establishment count for individual industries should be viewed as an approximation rather than a precise measurement. The counts for establishments with 20 employees or more are more reliable than the total number of establishments.

More detailed figures for this State will appear in the final census reports. Final reports will also include a comprehensive discussion of such concepts as "industry" and "establishment," as well as the various statistical items such as "employment," "value of shipments," and "value added." Similar preliminary and final reports will be issued for other States during the coming months. A series of preliminary summary reports showing U.S. totals for each manufacturing industry and for each State are being issued. Final industry reports and final area reports will be published during 1974.

Order forms describing the individual reports and listing their prices may be obtained from any U.S. Department of Commerce district office or from the Publications Distribution Section, Social and Economic Statistics Administration, Washington, D.C. 20233.

The 1972 Census of Manufactures is the 29th census of manufacturing establishments in the United States. For 1972, it was conducted jointly with the censuses of mineral industries, construction industries, retail trade, wholesale trade, and selected services under authority of Title 13 of the United States Code. Title 13 specifies that a census of manufactures be conducted every 5 years and, as amended, to cover years ending in "2" and "7". Title 13 also authorizes an annual sample survey of manufacturing establishments in interim years.



## Appendix B. EXPLANATION OF TERMS

*(For a more complete discussion of these terms and the method of compiling the Census of Manufactures, see the "Introduction" to the 1967 Census of Manufactures, Volume III).*

**All Employees**—All full-time and part-time employees on the payrolls of operating manufacturing establishments for any part of the pay period ending nearest the 12th of the months specified on the report form. Included are all persons on paid sick leave, paid holidays, and paid vacations during these pay periods. Officers of corporations are included as employees; proprietors and partners of unincorporated firms are excluded. The "all employee" number is the average number of production workers for the midmonth payroll period of March, May, August, and November plus the number of nonproduction employees in mid-March.

**Number of Production Workers**—Workers (up through the working foreman level) engaged in fabricating, processing, assembling, inspecting, receiving, packing, warehousing, shipping (but not delivering), and maintenance, repair, janitorial, and watchman services, product development, auxiliary production for plant's own use (e.g., powerplant), recordkeeping, and other closely associated services. Proprietors and partners are excluded.

**Payroll**—This item includes all forms of compensation such as salaries, wages, commissions, dismissal pay, bonuses, vacation and sick leave pay, and compensation in kind, prior to such deductions as employees' Social Security contributions, withholding taxes, group insurance, union dues, and savings bonds. The total includes salaries of officers of these establishments, if a corporation; it excludes payments to the proprietor or partners, if an unincorporated concern. Respondents were told that in reporting they could follow the definition of payrolls used for calculating the Federal withholding tax.

**Man-Hours of Production Workers**—This total relates to production-worker man-hours worked or paid for at the plant including actual overtime hours (not straight-time equivalent hours). It excludes hours paid for vacation, holidays, or sick leave when the employee was not at the plant.

**Cost of Materials**—The term "Cost of Materials" refers to charges actually paid or payable for items consumed or put into production during the year, including freight and other direct charges incurred by the establishment in acquiring these materials. It includes the cost of materials or fuel consumed regardless of

whether these items were purchased by the establishment from other companies, transferred to it from other establishments of the same company, or withdrawn from inventory during the year. The establishment was requested to value materials transferred from other parts of the company at its approximate market value, not at cost of production. The important components of this cost item are (a) all raw materials, semifinished goods, parts, components, containers, scrap, and supplies put into production or used as operating supplies and for repair and maintenance during the year; (b) electric energy purchased; (c) fuels consumed for heat, power, or the generation of electricity; (d) work done by others on materials or parts furnished by manufacturing establishments (contract work); and (e) products bought and resold in the same condition.

**Value of Shipments**—The value of shipments is the received or receivable net selling value, f.o.b. plant (exclusive of freight and taxes), of all products shipped, both primary and secondary, as well as all miscellaneous receipts such as receipts for contract work performed for others, installation and repair, sales of scrap, and sale of products bought and resold without further processing. Included are all items made by the establishment or for it under contract from materials owned by it whether sold, transferred to other plants of the same company, or shipped on consignment. The net selling value of products made in one plant on a contract basis from materials owned by another was reported by the plant providing the materials.

In the case of multiunit companies, the manufacturer was requested to report the value of products transferred to other establishments of the same company at full economic value; i.e., to include not only the direct costs of production but also a reasonable proportion of "all other costs" (including company overhead) and profit.

**Duplication in Cost of Materials and Value of Products**—The aggregate cost of materials and value-of-shipments figures for industry groups and for all manufacturing industries may include large amounts of duplication since the products of some industries are used as materials by others. With some important exceptions, such as motor vehicles and parts, this duplication is not significant within individual industries but arises from the addition of the totals of related industries in successive stages of the production of a finished manufactured product. Examples are the addition of flour mills to bakeries in the food group and the addition of pulp mills to paper mills in the paper and allied products group of industries. Esti-



mates of this duplication indicate that the value of manufactured products exclusive of such duplication—the value of finished manufactures—approximates two-thirds of the total value of products.

Prior to 1962, the Bureau of the Census did not publish figures for cost of materials or value of shipments if they contained significant duplication. Effective with the 1962 annual survey these figures were shown at all industry levels for the United States to meet the requests for their use in studies in which the presence of an indeterminate amount of duplication is not a limiting factor. However, they are appropriately footnoted. Effective with the 1964 annual survey, these industry group totals are also shown at the State, standard metropolitan statistical area, and large-county level.

Even where there is no significant amount of duplication, value-of-shipments figures are deficient as measures of the relative economic importance of individual manufacturing industries or geographic areas because of the wide variation in ratio of materials, labor, and other processing costs to value of shipments among industries.

**Value Added by Manufacture**—This measure of manufacturing activity is derived by subtracting the cost of materials, supplies, containers, fuel, purchased electricity, and cost of resales contract work from the value of shipments for products manufactured plus resales and receipts for services rendered. The result of this calculation is adjusted by the net change in finished goods and work-in-process inventories between the beginning and end of the year. (In the few industries that report value of production rather than value of shipments, only changes in work-in-process inventories are used to adjust value added. In the shipbuilding and repairing industry, no inventory adjustment is made.)

“Value added” avoids the duplication in the value of shipments figure which results from the use of products of some establishments as materials by others. Value added is considered to be the best value measure available for comparing the relative economic importance of manufacturing among industries and geographic areas.

**Expenditures for Plant and Equipment**—Manufacturing establishments in operation and establishments under construction but not yet in operation, were asked to report their expenditures for (a) permanent additions and major alterations to the manufacturing establishment, and (b) new machinery and equipment used for replacement purposes and additions to plant capacity if they are of the type for which depreciation accounts are ordinarily maintained.

These totals exclude expenditures for new facilities and equipment leased from nonmanufacturing concerns; new facilities owned by the Federal Government but operated under contract by private companies; and plant and equipment furnished to the manufacturer by communities and nonprofit organizations. Expenditures for used plant and equipment (although reported in the census), expenditures for land, and cost of maintenance and repairs charged as current operating expense are also omitted from the figures for new capital expenditures.

**Central Administrative Offices and Auxiliary Units**—In the 1972 census as in previous years, respondents were asked to file separate reports for central administrative offices or auxiliary units which were (1) at different locations from the establishments served or, (2) at the same location as one of these establishments but were not operated as an integral part thereof and served two or more establishments. The functions of employees in central administrative offices include general company policy determination, planning and management (that is, company purchasing, accounting, general engineering, direction of company personnel matters, and legal and patent matters). Auxiliaries are storage facilities, garages, repair shops, purchasing offices, sales promotion offices, and research laboratories serving the plants or central management of the company.

**Standard Metropolitan Statistical Areas**—Standard metropolitan statistical areas (SMSA) are integrated economic and social units with a large volume of daily travel and communication between the central city and outlying parts of the area.<sup>1</sup> Each area (except in New England) consists of one whole county or more. An area may contain not only highly industrialized counties but also adjoining counties which, though primarily residential in character, contribute significantly to the industrial counties' labor force and are socially and economically integrated with the central city. These areas are defined by the Federal Committee on Standard Metropolitan Statistical Areas of the Office of Management and Budget for general-purpose use throughout the Federal Government in presenting economic and social data. In the New England States, similar intergration criteria are applied in defining

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<sup>1</sup> Each standard metropolitan statistical area must include either (1) a city with 50,000 or more inhabitants, or (2) a city having a population of at least 25,000 which (a) with the addition of the population of contiguous places has a population density of at least 1,000 persons per square mile; (b) constitutes, for general economic and social purposes, a single community with a combined population of at least 50,000; and (c) includes a total population of at least 75,000 in the county or counties in which the city and contiguous places are located.

SMSA's on a city and town basis because towns rather than counties are regarded as the significant unit in this region of the country.

The requirement that each SMSA consist of county units (except in New England) sometimes results in the inclusion in an area of considerable amount of territory which would not ordinarily be considered "metropolitan," much less "industrial." It is recognized that metropolitan areas could be more accurately defined in terms of smaller area segments such as minor civil

divisions, but the usefulness of areas so defined would be limited by the fact that many types of economic and social data are available only on a county basis.

Each SMSA is designated by the name of the principal city of the area. In addition to the name of the principal city, the area title may include one or two additional city names.

The data for SMSA's which changed definition since the 1967 census have not been retabulated on the new basis for years prior to 1972.







## PRELIMINARY REPORT

**1972 CENSUS OF  
MANUFACTURES**

## AREA SERIES

72(P)-S20

February 1974

U. S. DEPARTMENT OF COMMERCE • Social and Economic Statistics Administration • BUREAU OF THE CENSUS

**Maine**

Value added by manufacturing in 1972 in the State of Maine amounted to \$1,397 million, a 16-percent increase from 1971 and a 31-percent increase from 1967.

This report presents preliminary results from the 1972 Census of Manufactures for the State, its Standard Metropolitan Statistical Areas, and its counties.

Data are provided for industry groups within the State. Historical data, back to 1958, are included for the State as a whole,

and 1967 figures on employment and value added are provided for the smaller areas.

The figures in this report have been subjected to only preliminary review and must be regarded as approximations of the final census figures. No adjustments have been made in the value figures for changes in price level.

For an explanation of the terms used in the tables, see the appendix at the end of this report.

**TABLE 1. General Statistics for the State: 1972 and Earlier Years**

(See appendix, Explanation of Terms)

Year	Establishments		All employees <sup>1</sup>		Production workers			Value added by manufacture	Cost of materials <sup>2</sup>	Value of shipments <sup>2</sup>	Capital expenditures, new
	Total	With 20 employees or more	Number	Payroll	Number	Man-hours	Wages				
	(number)	(number)	(1,000)	(million dollars)	(1,000)	(millions)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(million dollars)
MAINE											
1972 Census .....	2,060	584	100.4	699.5	82.6	162.6	512.1	1,396.6	1,482.8	2,869.0	137.7
1971 ASM .....	(NA)	(NA)	95.4	615.6	78.5	151.6	448.7	1,208.3	1,303.3	2,495.2	120.8
1970 ASM .....	(NA)	(NA)	103.8	630.6	86.4	168.1	471.8	1,230.9	1,215.5	2,443.8	140.2
1969 ASM .....	(NA)	(NA)	110.9	655.2	92.2	183.7	486.1	1,225.9	1,257.2	2,493.1	103.6
1968 ASM .....	(NA)	(NA)	112.3	624.5	94.7	187.2	472.0	1,134.3	1,222.9	2,343.4	114.2
1967 Census .....	2,385	615	110.8	577.2	93.6	186.6	437.3	1,069.5	1,164.9	2,215.5	98.8
1966 ASM .....	(NA)	(NA)	107.5	533.4	90.6	184.5	405.7	980.3	1,088.6	2,052.7	133.7
1965 ASM .....	(NA)	(NA)	104.1	491.9	87.6	178.8	374.3	895.1	987.6	1,866.2	113.5
1964 ASM .....	(NA)	(NA)	101.3	459.4	85.6	173.2	350.6	822.9	911.9	1,720.3	70.7
1963 Census .....	2,535	594	99.9	438.6	84.1	170.1	335.1	785.7	(NA)	(NA)	62.5
1962 ASM .....	(NA)	(NA)	102.0	431.9	86.3	174.9	332.0	758.7	(NA)	(NA)	48.5
1961 ASM .....	(NA)	(NA)	100.4	411.3	85.0	171.2	317.8	709.1	(NA)	(NA)	54.1
1960 ASM .....	(NA)	(NA)	100.9	414.3	85.8	175.9	314.2	693.5	(NA)	(NA)	54.8
1959 ASM .....	(NA)	(NA)	100.1	395.5	85.7	172.8	301.1	655.7	(NA)	(NA)	41.7
1958 Census .....	2,755	579	98.3	377.2	83.7	166.2	285.2	628.3	(NA)	(NA)	44.3

Note: "ASM" data are based on a representative sample of manufacturing establishments canvassed in the Annual Survey of Manufactures. These estimates may differ from the results of a complete canvass of all manufacturing establishments. The standard errors associated with these estimates are published in the annual survey of manufactures volumes for this period. For comparative purposes, the 1972 ASM estimate for the State of Maine, was 98 thousand employees, and \$1,331 million in value added with corresponding standard error of estimate of 3 and 1.

(NA) Not available.

<sup>1</sup>Includes employment and payroll at central administrative offices and auxiliary units. (For a definition of these units, see appendix.)

<sup>2</sup>The total cost of materials and value of shipments may include extensive duplication arising from shipments between establishments in the same industry classification. (For a more complete explanation, see appendix.)

TABLE 2. General Statistics for the State, Standard Metropolitan Statistical Areas, and Counties: 1972 and 1967

(See appendix, Explanation of Terms)

State, standard metropolitan statistical areas, and counties <sup>1</sup>	1972											1967	
	Establishments		All employees <sup>2</sup>		Production workers			Value added by manufac- ture	Cost of materials <sup>3</sup>	Value of shipments <sup>3</sup>	Capital expendi- tures, new	All employees	Value added by manufac- ture
	Total	With 20 employees or more	Number	Payroll	Number	Man-hours	Wages						
	(number)	(number)	(1,000)	(million dollars)	(1,000)	(million)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(1,000)	(million dollars)
MAINE, TOTAL . . . . .	2 060	584	100.4	699.5	82.6	162.6	512.1	1 396.6	1 482.8	2 869.0	137.7	110.8	1 069.5
STANDARD METROPOLITAN STATISTICAL AREAS <sup>4</sup>													
LEWISTON-AUBURN . . . . .	171	69	10.3	62.0	8.4	15.5	42.3	113.3	108.9	220.5	7.9	13.5	102.0
PORTLAND . . . . .	242	92	16.6	130.0	12.9	26.6	88.5	277.2	247.4	500.6	13.6	14.7	189.7
COUNTIES													
ANDROSCOGGIN . . . . .	205	80	11.6	69.0	9.5	17.7	47.9	125.8	124.9	248.8	(D)	14.9	110.1
ARROSTOCK . . . . .	169	47	6.8	43.7	5.9	12.1	34.7	92.2	134.5	229.4	7.9	5.9	61.5
CUMBERLAND . . . . .	288	104	17.9	135.9	13.9	28.2	91.4	292.0	237.9	519.1	13.9	18.7	219.6
FRANKLIN . . . . .	119	23	4.7	34.2	4.0	7.6	26.3	74.5	79.0	154.2	3.4	5.1	43.0
HANCOCK . . . . .	62	13	2.1	16.1	1.7	3.5	13.1	38.2	43.6	81.5	2.7	2.0	25.1
KENNEBEC . . . . .	129	44	10.5	74.2	8.7	16.6	55.9	155.8	183.9	337.9	11.0	10.6	114.8
KNOX . . . . .	80	21	2.4	13.3	1.9	3.2	9.5	34.0	35.6	68.6	2.1	2.5	22.6
LINCOLN . . . . .	44	7	.7	4.4	.6	1.1	3.4	6.7	7.2	14.0	.5	1.1	9.0
OXFORD . . . . .	174	30	5.7	43.7	4.6	9.7	32.7	77.8	74.7	151.7	9.5	7.1	74.1
PENOBSCOT . . . . .	223	67	11.8	95.3	9.5	19.9	69.1	189.3	226.4	415.2	40.8	14.5	154.5
PISCATAQUIS . . . . .	64	14	1.6	9.0	1.4	2.8	7.3	15.0	12.9	28.1	1.7	1.9	15.6
SAGadahoc . . . . .	26	9	3.9	32.0	3.2	6.0	22.9	63.3	32.5	95.6	(D)	4.3	43.5
SOMERSET . . . . .	126	24	4.4	26.9	3.8	7.4	20.8	42.8	50.5	94.7	3.5	5.9	44.6
WALDO . . . . .	56	15	2.1	11.9	1.8	3.6	9.3	19.9	52.8	72.7	2.4	1.9	13.5
WASHINGTON . . . . .	93	19	2.6	16.0	2.3	4.2	12.5	29.2	51.5	82.0	17.5	2.5	23.7
YORK . . . . .	176	65	11.4	71.3	9.4	18.3	53.2	151.2	130.2	270.6	4.5	12.0	94.3

Note: The following symbols indicate employment size range for 1967:

AA less than 250 employees      EE 1,000 to 2,499 employees  
BB 250 to 499 employees      FF 2,500 employees and over  
CC 500 to 999 employees

(D) Withheld to avoid disclosing figures for individual companies.

<sup>1</sup>Some counties were withheld from publication in order to (a) avoid disclosing figures for individual companies or (b) permit further checking of the figures for smaller counties. Additional detail will appear in the final report for this State.

<sup>2</sup>Includes employment and payroll at central administrative offices and auxiliary units. (For a definition of these units, see appendix.)

<sup>3</sup>The total cost of materials and value of shipments may include extensive duplication arising from shipments between establishments in the same industry classification. (For a more complete explanation, see appendix.)

<sup>4</sup>The standard metropolitan statistical areas in this State are defined as follows:

LEWISTON-AUBURN SMSA: Consists of Auburn and Lewiston cities and Lisbon town in Androscoggin County, ME.

PORTLAND SMSA: Consists of Portland, South Portland, and Westbrook cities, and Cape Elizabeth, Cumberland, Falmouth, Freeport, Gorham, Scarborough, Windham, and Yarmouth towns in Cumberland County, and Saco city and Old Orchard Beach town in York County, ME.



TABLE 3. General Statistics for the State, by Industry Groups and Industries: 1972 and 1967

(See appendix, Explanation of Terms)

Code	Industry	1972										1967		
		Establishments		All employees		Production workers			Value added by manufacture	Cost of materials <sup>1</sup>	Value of shipments <sup>1</sup>	Capital expenditures, new	All employees	Value added by manufacture
		Total	With 20 employees or more	Number	Payroll	Number	Man-hours	Wages						
		(number)	(number)	(1,000)	(million dollars)	(1,000)	(million)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(1,000)	(million dollars)
	ALL INDUSTRIES, TOTAL <sup>2</sup> . . . .	2 060	584	100.4	699.5	82.6	162.6	512.1	1 396.6	1 482.8	2 810.0	137.7	110.8	1 069.5
20	FOOD AND KINDRED PRODUCTS. . . .	250	95	12.1	72.1	9.4	17.6	46.5	165.2	324.7	489.7	9.3	11.6	124.5
201	MEAT PRODUCTS. . . . .	24	11	2.4	14.2	2.0	4.0	10.7	20.2	83.5	104.3	.6	1.7	12.3
2013	SAUSAGES AND OTHER PREPARED MEATS. .	5	3	.3	2.3	.2	.3	1.0	4.0	12.2	16.4	.2	.2	2.7
202	DAIRY PRODUCTS . . . . .	51	16	1.2	9.3	.5	1.0	3.7	20.9	50.7	71.4	1.1	1.3	15.3
203	PRESERVED FRUITS AND VEGETABLES. .	33	17	3.6	19.2	3.2	6.3	14.7	52.2	69.0	120.9	3.1	(NA)	(NA)
2037	FROZEN FRUITS AND VEGETABLES . . . .	9	8	1.8	11.0	1.6	3.4	8.3	28.3	33.9	62.2	2.3	(NA)	(NA)
205	BAKERY PRODUCTS. . . . .	32	9	1.4	12.6	.9	1.7	6.0	27.5	24.0	51.5	1.8	1.8	23.7
2051	BREAD, CAKE, AND RELATED PRODUCTS. .	32	9	1.4	12.6	.9	1.7	6.0	27.5	24.0	51.5	1.8	1.8	23.7
208	BEVERAGES. . . . .	26	8	.3	2.2	.2	.3	.8	7.2	12.9	20.1	.4	.5	6.6
209	MISC. FOODS AND KINDRED PRODUCTS .	54	25	2.5	10.7	2.1	3.2	7.5	22.9	40.1	62.7	1.8	(NA)	(NA)
2091	CANNED AND CURED SEAFOODS. . . . .	27	16	1.4	5.0	1.3	1.8	4.0	12.2	23.4	35.6	.9	(NA)	(NA)
2092	FRESH OR FROZEN PACKAGED FISH. . . .	16	6	.8	3.6	.7	1.2	2.8	7.0	11.4	18.2	.7	(NA)	(NA)
22	TEXTILE MILL PRODUCTS. . . . .	48	36	3.6	51.2	7.5	15.0	42.0	89.5	97.1	133.6	5.1	11.6	90.0
2231	WEAVING AND FINISHING MILLS, WOOL. .	12	10	2.8	17.0	2.5	5.6	13.8	36.7	36.6	70.9	4.0	4.1	32.1
228	YARN AND THREAD MILLS. . . . .	12	7	1.0	4.7	.9	1.9	4.1	7.7	11.6	18.8	2.4	1.0	7.4
229	MISCELLANEOUS TEXTILE GOODS. . . . .	6	5	.9	5.7	.8	1.6	4.7	10.6	18.0	28.4	.4	CC	(D)
23	APPAREL, OTHER TEXTILE PRODUCTS	41	26	3.6	17.4	3.1	5.0	13.1	42.2	28.0	69.7	.8	3.6	23.1
233	WOMEN'S, AND MISSES' OUTERWEAR . .	6	5	.5	1.9	.4	.7	1.6	2.3	.5	2.8	(Z)	.5	2.1
24	LUMBER AND WOOD PRODUCTS . . . . .	911	112	11.9	72.1	10.5	20.7	58.7	135.6	139.6	277.2	14.8	(NA)	(NA)
2411	LOGGING CAMPS, LOGGING CONTRACTORS.	598	30	3.6	24.0	3.1	6.0	20.2	50.2	63.3	114.3	6.5	4.4	40.2
249	MISCELLANEOUS WOOD PRODUCTS. . . .	90	40	4.7	25.5	4.3	8.4	21.0	43.7	27.3	71.0	(D)	(NA)	(NA)
25	FURNITURE AND FIXTURES . . . . .	23	10	.8	5.6	.6	1.3	4.1	9.5	7.6	16.8	.5	.9	6.5
251	HOUSEHOLD FURNITURE. . . . .	16	7	.5	3.1	.4	.9	2.3	5.8	4.5	10.1	.5	(NA)	(NA)
26	PAPER AND ALLIED PRODUCTS. . . . .	48	34	16.6	173.2	13.4	29.6	133.0	358.5	434.2	794.6	72.0	18.1	276.8
2621	PAPERMILLS, EXCEPT BUILDING PAPER. .	16	16	13.4	146.7	10.8	24.2	112.9	289.0	362.5	654.3	67.4	14.6	224.6
264	MISC. CONVERTED PAPER PRODUCTS . .	12	8	2.3	20.1	1.9	3.9	15.3	55.5	56.1	110.9	4.1	2.0	36.3
265	PAPERBOARD CONTAINERS AND BOXES. . .	14	6	.5	3.2	.4	.7	2.3	6.4	9.6	16.0	.1	.5	4.3
2653	CORRUGATED AND SOLID FIBER BOXES . .	6	4	.3	2.4	.3	.6	1.8	3.8	8.1	11.8	.1	.3	3.2
27	PRINTING AND PUBLISHING. . . . .	150	27	2.8	21.0	1.7	3.0	11.5	40.6	15.6	56.2	2.3	2.4	26.7
2711	NEWSPAPERS . . . . .	46	13	1.9	14.2	1.0	1.8	7.4	26.1	5.8	32.0	.7	1.7	18.2
275	COMMERCIAL PRINTING. . . . .	78	11	.7	5.2	.5	1.0	3.3	10.8	7.8	18.6	1.3	(NA)	(NA)
2751	COMMERCIAL PRINTING, LETTERPRESS . .	60	6	.5	3.4	.3	.6	2.1	7.7	6.3	14.0	.7	(NA)	(NA)
28	CHEMICALS AND ALLIED PRODUCTS. . .	32	12	.7	5.5	.5	1.0	3.3	15.2	22.1	37.4	1.2	1.0	11.1
30	RUBBER AND MISC. PLASTICS PROD . . .	29	12	3.4	20.0	3.0	5.7	15.0	46.0	33.4	79.4	2.1	(NA)	(NA)
3079	MISCELLANEOUS PLASTICS PRODUCTS. . .	15	6	1.6	10.1	1.2	2.5	6.7	31.1	23.8	55.1	1.0	(NA)	(NA)
31	LEATHER AND LEATHER PRODUCTS . . .	117	90	20.4	114.5	17.9	32.0	86.7	194.7	191.7	384.9	(D)	22.0	197.9
3111	LEATHER TANNING AND FINISHING. . . .	16	11	2.0	14.8	1.8	3.5	11.6	30.0	51.2	78.8	1.6	2.1	20.8
314	FOOTWEAR, EXCEPT RUBBER. . . . .	62	67	17.2	92.7	15.1	26.6	70.4	152.9	129.9	283.8	4.2	24.4	168.3
3142	HOUSE SLIPPERS . . . . .	3	3	.4	2.3	.3	.5	1.5	3.3	2.4	5.6	.1	(NA)	(NA)
3143	MEN'S FOOTWEAR, EXCEPT ATHLETIC. .	20	19	6.1	33.1	5.5	9.6	25.6	62.3	54.2	116.7	2.2	(NA)	(NA)
3144	WOMEN'S FOOTWEAR, EXCEPT ATHLETIC. .	46	38	8.7	44.9	7.7	13.4	34.0	62.4	57.8	121.8	1.2	(NA)	(NA)
3149	FOOTWEAR, EXCEPT RUBBER, NEC . . . .	11	7	2.0	12.4	1.6	3.1	9.2	24.9	15.6	39.6	.8	(NA)	(NA)
32	STONE, CLAY, AND GLASS PRODUCTS . .	59	18	1.0	7.5	.8	1.7	5.3	16.8	14.5	31.0	1.8	1.2	13.9
3273	READY-MIXED CONCRETE . . . . .	21	8	.4	3.3	.3	.7	2.3	7.8	6.4	14.2	.8	.4	4.4
34	FABRICATED METAL PRODUCTS. . . . .	67	21	2.4	20.4	2.0	4.2	15.7	37.4	37.7	74.5	1.2	(NA)	(NA)
3441	FABRICATED STRUCTURAL METAL PRODUCTS	8	6	.5	5.1	.4	.9	3.4	9.1	13.5	22.2	(D)	88	(D)
35	MACHINERY, EXCEPT ELECTRICAL. . .	84	23	2.6	23.3	1.9	4.3	15.3	47.1	24.0	70.5	1.7	2.0	17.9
353	CONSTRUCTION AND RELATED MACHINERY	5	4	.3	2.4	.2	.5	1.5	6.2	4.8	10.6	1.0	(NA)	(NA)
354	METALWORKING MACHINERY . . . . .	15	6	.3	3.2	.3	.6	2.3	4.5	2.7	5.3	.1	.2	2.0
355	SPECIAL INDUSTRY MACHINERY . . . . .	17	6	.6	5.0	.4	.8	2.9	7.7	4.8	13.0	.5	.4	1.1
36	ELECTRIC, ELECTRONIC EQUIPMENT. . .	25	18	6.0	37.4	5.0	10.2	25.7	109.2	37.9	138.5	2.7	(NA)	(NA)
366	COMMUNICATION EQUIPMENT. . . . .	5	5	.9	7.0	.8	1.7	4.8	15.0	7.1	21.3	.5	FF	(D)
367	ELECTRONIC COMPONENTS AND ACCESS .	7	4	3.2	18.2	2.6	5.3	12.0	67.1	11.2	70.9	1.3	FF	(D)
38	INSTRUMENTS AND RELATED PRODUCTS	13	5	.3	2.5	.2	.5	1.6	4.0	4.1	7.9	.1	(NA)	(NA)
39	MISC. MANUFACTURING INDUSTRIES . .	54	8	.9	4.4	.8	1.5	3.3	9.0	5.6	13.8	1.1	.2	4.7
394	TOYS AND SPORTING GOODS. . . . .	10	3	.3	1.8	.3	.6	1.4	3.5	3.0	5.8	.9	(NA)	(NA)
399	MISCELLANEOUS MANUFACTURES . . . . .	28	4	.5	2.2	.4	.8	1.6	4.6	2.4	6.9	.2	.5	3.2
--	ADMINISTRATIVE AND AUXILIARY . . . .	19	11	.7	6.3	-	-	-	-	-	-	-	.6	-

Note: The following symbols indicate employment size range for 1967:

AA less than 250 employees

EE 1,000 to 2,499 employees

BB 250 to 499 employees

FF 2,500 employees and over

CC 500 to 999 employees

- Represents zero. (NA) Not available. (D) Withheld to avoid disclosing figures for individual companies.

<sup>1</sup>The total cost of materials and value of shipments for industry groups shown may include extensive duplication arising from shipments between establishments in the same industry classification. (For a more complete explanation, see appendix.)<sup>2</sup>Includes figures for industry groups which have been withheld from publication in order to (a) avoid disclosing figures for individual companies or (b) permit further checking of figures for smaller industry groups. Additional detail will appear in the final report for this State.

## Appendix A. SCOPE AND COVERAGE

This report is one of a series presenting preliminary information, by State, from the 1972 Census of Manufactures. The data will be superseded in a final report which, in turn, will be included in *Volume III, Area Statistics, 1972 Census of Manufactures*. The final report will include a comprehensive discussion of the concepts and definitions used in the census.

The census of manufactures covers each manufacturing establishment in the United States with one paid employee or more; manufacturing establishments with no employees are excluded. Firms which operated more than one establishment were required to file a separate report for each location. Companies which engaged in distinctly different lines of activity at one location were asked to submit separate reports if the company records permitted such a separation and the activities were of significant size.

This report includes figures for administrative offices, warehouses, garages, or other auxiliary units which service manufacturing establishments.

In the 1972 census, the approximately 120,000 manufacturing establishments with fewer than 10 employees were excused from filing reports. Under special arrangements which safeguarded the confidentiality of both tax and census records, data on payrolls, sales, and industry classification from the administrative records of the Social Security Administration and the Internal Revenue Service were made available to the Census Bureau for use in the 1972 Economic Censuses (retail and wholesale trade, service industries, construction industries, manufactures, and mineral industries). Estimates for data other than payrolls and sales for these small establishments were constructed from industry averages. The effect on industry aggregates is slight in most industries. For manufacturing as a whole, these small establishments account for less than 3 percent of the payrolls and value added.

Establishments are classified by industry in accordance with industry definitions described in the 1972 edition of the Standard Industrial Classification (SIC) Manual. For 1972, the SIC was significantly revised and the comparability with prior year's data for some industries was significantly affected. The comparability at the 2- and 3-digit SIC levels was less affected. The final volumes of the 1972 Census of Manufactures will contain a table relating aggregates based on the 1972 SIC with aggregates derived from classifying establishments according to the 1967 SIC definitions.

As in earlier censuses, a number of small establishments may have been misclassified as to industry. However, such possible misclassifications have significant effect on *none* of the statistics except the number of establishments. As indicated above, report forms were not mailed to very small establishments (fewer than 10 employees). The industry classifications for these establishments were assigned on the basis of brief descriptions of the general activity of the establishment. Where the description is incomplete or there are relatively fine lines of demarcation among industries or between manufacturing and nonmanufacturing activity, the code assigned to an establishment could differ from that which would have been assigned on the basis of more complete product information. Therefore, the total establishment count for individual industries should be viewed as an approximation rather than a precise measurement. The counts for establishments with 20 employees or more are more reliable than the total number of establishments.

More detailed figures for this State will appear in the final census reports. Final reports will also include a comprehensive discussion of such concepts as "industry" and "establishment," as well as the various statistical items such as "employment," "value of shipments," and "value added." Similar preliminary and final reports will be issued for other States during the coming months. A series of preliminary summary reports showing U.S. totals for each manufacturing industry and for each State are being issued. Final industry reports and final area reports will be published during 1974.

Order forms describing the individual reports and listing their prices may be obtained from any U.S. Department of Commerce district office or from the Publications Distribution Section, Social and Economic Statistics Administration, Washington, D.C. 20233.

The 1972 Census of Manufactures is the 29th census of manufacturing establishments in the United States. For 1972, it was conducted jointly with the censuses of mineral industries, construction industries, retail trade, wholesale trade, and selected services under authority of Title 13 of the United States Code. Title 13 specifies that a census of manufactures be conducted every 5 years and, as amended, to cover years ending in "2" and "7". Title 13 also authorizes an annual sample survey of manufacturing establishments in interim years.



## Appendix B. EXPLANATION OF TERMS

*(For a more complete discussion of these terms and the method of compiling the Census of Manufactures, see the "Introduction" to the 1967 Census of Manufactures, Volume III).*

**All Employees**—All full-time and part-time employees on the payrolls of operating manufacturing establishments for any part of the pay period ending nearest the 12th of the months specified on the report form. Included are all persons on paid sick leave, paid holidays, and paid vacations during these pay periods. Officers of corporations are included as employees; proprietors and partners of unincorporated firms are excluded. The "all employee" number is the average number of production workers for the midmonth payroll period of March, May, August, and November plus the number of nonproduction employees in mid-March.

**Number of Production Workers**—Workers (up through the working foreman level) engaged in fabricating, processing, assembling, inspecting, receiving, packing, warehousing, shipping (but not delivering), and maintenance, repair, janitorial, and watchman services, product development, auxiliary production for plant's own use (e.g., powerplant), recordkeeping, and other closely associated services. Proprietors and partners are excluded.

**Payroll**—This item includes all forms of compensation such as salaries, wages, commissions, dismissal pay, bonuses, vacation and sick leave pay, and compensation in kind, prior to such deductions as employees' Social Security contributions, withholding taxes, group insurance, union dues, and savings bonds. The total includes salaries of officers of these establishments, if a corporation; it excludes payments to the proprietor or partners, if an unincorporated concern. Respondents were told that in reporting they could follow the definition of payrolls used for calculating the Federal withholding tax.

**Man-Hours of Production Workers**—This total relates to production-worker man-hours worked or paid for at the plant including actual overtime hours (not straight-time equivalent hours). It excludes hours paid for vacation, holidays, or sick leave when the employee was not at the plant.

**Cost of Materials**—The term "Cost of Materials" refers to charges actually paid or payable for items consumed or put into production during the year, including freight and other direct charges incurred by the establishment in acquiring these materials. It includes the cost of materials or fuel consumed regardless of

whether these items were purchased by the establishment from other companies, transferred to it from other establishments of the same company, or withdrawn from inventory during the year. The establishment was requested to value materials transferred from other parts of the company at its approximate market value, not at cost of production. The important components of this cost item are (a) all raw materials, semifinished goods, parts, components, containers, scrap, and supplies put into production or used as operating supplies and for repair and maintenance during the year; (b) electric energy purchased; (c) fuels consumed for heat, power, or the generation of electricity; (d) work done by others on materials or parts furnished by manufacturing establishments (contract work); and (e) products bought and resold in the same condition.

**Value of Shipments**—The value of shipments is the received or receivable net selling value, f.o.b. plant (exclusive of freight and taxes), of all products shipped, both primary and secondary, as well as all miscellaneous receipts such as receipts for contract work performed for others, installation and repair, sales of scrap, and sale of products bought and resold without further processing. Included are all items made by the establishment or for it under contract from materials owned by it whether sold, transferred to other plants of the same company, or shipped on consignment. The net selling value of products made in one plant on a contract basis from materials owned by another was reported by the plant providing the materials.

In the case of multiunit companies, the manufacturer was requested to report the value of products transferred to other establishments of the same company at full economic value; i.e., to include not only the direct costs of production but also a reasonable proportion of "all other costs" (including company overhead) and profit.

**Duplication in Cost of Materials and Value of Products**—The aggregate cost of materials and value-of-shipments figures for industry groups and for all manufacturing industries may include large amounts of duplication since the products of some industries are used as materials by others. With some important exceptions, such as motor vehicles and parts, this duplication is not significant within individual industries but arises from the addition of the totals of related industries in successive stages of the production of a finished manufactured product. Examples are the addition of flour mills to bakeries in the food group and the addition of pulp mills to paper mills in the paper and allied products group of industries. Esti-



mates of this duplication indicate that the value of manufactured products exclusive of such duplication—the value of finished manufactures—approximates two-thirds of the total value of products.

Prior to 1962, the Bureau of the Census did not publish figures for cost of materials or value of shipments if they contained significant duplication. Effective with the 1962 annual survey these figures were shown at all industry levels for the United States to meet the requests for their use in studies in which the presence of an indeterminate amount of duplication is not a limiting factor. However, they are appropriately footnoted. Effective with the 1964 annual survey, these industry group totals are also shown at the State, standard metropolitan statistical area, and large-county level.

Even where there is no significant amount of duplication, value-of-shipments figures are deficient as measures of the relative economic importance of individual manufacturing industries or geographic areas because of the wide variation in ratio of materials, labor, and other processing costs to value of shipments among industries.

**Value Added by Manufacture**—This measure of manufacturing activity is derived by subtracting the cost of materials, supplies, containers, fuel, purchased electricity, and cost of resales contract work from the value of shipments for products manufactured plus resales and receipts for services rendered. The result of this calculation is adjusted by the net change in finished goods and work-in-process inventories between the beginning and end of the year. (In the few industries that report value of production rather than value of shipments, only changes in work-in-process inventories are used to adjust value added. In the shipbuilding and repairing industry, no inventory adjustment is made.)

“Value added” avoids the duplication in the value of shipments figure which results from the use of products of some establishments as materials by others. Value added is considered to be the best value measure available for comparing the relative economic importance of manufacturing among industries and geographic areas.

**Expenditures for Plant and Equipment**—Manufacturing establishments in operation and establishments under construction but not yet in operation, were asked to report their expenditures for (a) permanent additions and major alterations to the manufacturing establishment, and (b) new machinery and equipment used for replacement purposes and additions to plant capacity if they are of the type for which depreciation accounts are ordinarily maintained.

These totals exclude expenditures for new facilities and equipment leased from nonmanufacturing concerns; new facilities owned by the Federal Government but operated under contract by private companies; and plant and equipment furnished to the manufacturer by communities and nonprofit organizations. Expenditures for used plant and equipment (although reported in the census), expenditures for land, and cost of maintenance and repairs charged as current operating expense are also omitted from the figures for new capital expenditures.

**Central Administrative Offices and Auxiliary Units**—In the 1972 census as in previous years, respondents were asked to file separate reports for central administrative offices or auxiliary units which were (1) at different locations from the establishments served or, (2) at the same location as one of these establishments but were not operated as an integral part thereof and served two or more establishments. The functions of employees in central administrative offices include general company policy determination, planning and management (that is, company purchasing, accounting, general engineering, direction of company personnel matters, and legal and patent matters). Auxiliaries are storage facilities, garages, repair shops, purchasing offices, sales promotion offices, and research laboratories serving the plants or central management of the company.

**Standard Metropolitan Statistical Areas**—Standard metropolitan statistical areas (SMSA) are integrated economic and social units with a large volume of daily travel and communication between the central city and outlying parts of the area.<sup>1</sup> Each area (except in New England) consists of one whole county or more. An area may contain not only highly industrialized counties but also adjoining counties which, though primarily residential in character, contribute significantly to the industrial counties' labor force and are socially and economically integrated with the central city. These areas are defined by the Federal Committee on Standard Metropolitan Statistical Areas of the Office of Management and Budget for general-purpose use throughout the Federal Government in presenting economic and social data. In the New England States, similar intergration criteria are applied in defining

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<sup>1</sup> Each standard metropolitan statistical area must include either (1) a city with 50,000 or more inhabitants, or (2) a city having a population of at least 25,000 which (a) with the addition of the population of contiguous places has a population density of at least 1,000 persons per square mile; (b) constitutes, for general economic and social purposes, a single community with a combined population of at least 50,000; and (c) includes a total population of at least 75,000 in the county or counties in which the city and contiguous places are located.



SMSA's on a city and town basis because towns rather than counties are regarded as the significant unit in this region of the country.

The requirement that each SMSA consist of county units (except in New England) sometimes results in the inclusion in an area of considerable amount of territory which would not ordinarily be considered "metropolitan," much less "industrial." It is recognized that metropolitan areas could be more accurately defined in terms of smaller area segments such as minor civil

divisions, but the usefulness of areas so defined would be limited by the fact that many types of economic and social data are available only on a county basis.

Each SMSA is designated by the name of the principal city of the area. In addition to the name of the principal city, the area title may include one or two additional city names.

The data for SMSA's which changed definition since the 1967 census have not been retabulated on the new basis for years prior to 1972.

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**Social and Economic Statistics Administration**  
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## PRELIMINARY REPORT

**1972 CENSUS OF  
MANUFACTURES**

## AREA SERIES

72(P)-S21

ed April 1974

U S DEPARTMENT OF COMMERCE • Social and Economic Statistics Administration • BUREAU OF THE CENSUS

**Maryland**

Value added by manufacturing in 1972 in the State of Maryland amounted to \$4,686 million, a 10-percent increase from 1971 and a 24-percent increase from 1967.

This report presents preliminary results from the 1972 Census of Manufactures for the State, its Standard Metropolitan Statistical Areas, and its counties.

Data are provided for industry groups within the State. Historical data, back to 1958, are included for the State as a whole,

and 1967 figures on employment and value added are provided for the smaller areas.

The figures in this report have been subjected to only preliminary review and must be regarded as approximations of the final census figures. No adjustments have been made in the value figures for changes in price level.

For an explanation of the terms used in the tables, see the appendix at the end of this report.

TABLE 1. General Statistics for the State: 1972 and Earlier Years

(See appendix, Explanation of Terms)

Year	Establishments		All employees <sup>1</sup>		Production workers			Value added by manufacture	Cost of materials <sup>2</sup>	Value of shipments <sup>2</sup>	Capital expenditures, new
	Total	With 20 employees or more	Number	Payroll	Number	Man-hours	Wages				
	(number)	(number)	(1,000)	(million dollars)	(1,000)	(millions)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(million dollars)
MARYLAND											
1972 Census .....	3,544	1,414	252.2	2,347.4	174.5	344.0	1,116.8	4,686.4	5,290.5	9,938.5	273.7
1971 ASM .....	(NA)	(NA)	254.4	2,183.7	176.0	346.9	1,311.2	4,279.4	4,812.2	9,113.4	311.5
1970 ASM .....	(NA)	(NA)	272.4	2,175.6	191.2	377.2	1,329.7	4,067.9	4,769.1	8,826.4	384.4
1969 ASM .....	(NA)	(NA)	289.4	2,228.2	205.3	406.1	1,381.6	4,188.9	4,960.7	9,121.1	310.9
1968 ASM .....	(NA)	(NA)	284.7	2,067.7	203.1	399.7	1,286.9	4,084.4	4,704.8	8,765.2	247.4
1967 Census .....	3,401	1,463	287.6	1,956.0	205.4	405.6	1,208.5	3,781.3	4,303.1	8,066.3	251.6
1966 ASM .....	(NA)	(NA)	288.6	1,878.3	207.2	418.1	1,159.4	3,587.9	4,320.6	7,819.1	270.6
1965 ASM .....	(NA)	(NA)	270.7	1,703.2	195.6	394.8	1,060.2	3,381.0	4,000.5	7,111.2	224.5
1964 ASM .....	(NA)	(NA)	263.0	1,610.8	186.4	377.3	982.0	3,152.5	3,498.2	6,819.2	156.6
1963 Census .....	3,519	1,394	263.7	1,549.8	188.9	375.9	960.5	3,017.2	(NA)	(NA)	176.3
1962 ASM .....	(NA)	(NA)	252.2	1,421.7	182.9	355.7	887.8	2,821.5	(NA)	(NA)	223.9
1961 ASM .....	(NA)	(NA)	254.3	1,377.6	182.9	352.8	857.0	2,698.2	(NA)	(NA)	195.5
1960 ASM .....	(NA)	(NA)	257.2	1,346.0	187.6	368.7	854.3	2,694.8	(NA)	(NA)	179.1
1959 ASM .....	(NA)	(NA)	257.0	1,303.9	188.5	370.0	834.1	2,640.8	(NA)	(NA)	119.4
1958 Census .....	3,435	1,334	259.1	1,257.4	190.5	368.5	813.3	2,394.4	(NA)	(NA)	128.1

Note: "ASM" data are based on a representative sample of manufacturing establishments canvassed in the Annual Survey of Manufactures. These estimates may differ from the results of a complete canvass of all manufacturing establishments. The standard errors associated with these estimates are published in the annual survey of manufactures volumes for this period. For comparative purposes, the 1972 ASM estimate for the State of Maryland was 248 thousand employees, and \$4,659 million in value added with corresponding standard error of estimate of 1 and 1.

(NA) Not available.

<sup>1</sup>Includes employment and payroll at central administrative offices and auxiliary units. (For a definition of these units, see appendix.)

<sup>2</sup>The total cost of materials and value of shipments may include extensive duplication arising from shipments between establishments in the same industry classification. (For a more complete explanation, see appendix.)

TABLE 2. General Statistics for the State, Standard Metropolitan Statistical Areas, and Counties: 1972 and 1967

(See appendix, Explanation of Terms)

State, standard metropolitan statistical areas, and counties <sup>1</sup>	1972										1967		
	Establishments		All employees <sup>2</sup>		Production workers			Value added by manufac- ture	Cost of materials <sup>3</sup>	Value of shipments <sup>3</sup>	Capital expendi- tures, new	All employees	Value added by manufac- ture
	Total	With 20 employees or more	Number	Payroll	Number	Man-hours	Wages						
	(number)	(number)	(1,000)	(million dollars)	(1,000)	(million)	(million, dollars)	(million dollars)	(million dollars)	(million dollars)	(million, dollars)	(1,000)	(million dollars)
MARYLAND, TOTAL. . . . .	3 544	1 414	252.2	2 347.4	174.5	344.0	1 416.8	4 686.4	5 290.5	9 938.5	273.7	287.6	3 781.3
STANDARD METROPOLITAN STATISTICAL AREAS <sup>4</sup>													
BALTIMORE. . . . .	1 990	848	176.1	1 701.5	120.0	237.6	1 021.5	3 453.5	3 942.7	7 368.5	230.3	209.7	2 858.8
WASHINGTON, DC-MD-VA . . . . .	1 721	475	54.8	586.1	29.0	54.6	259.6	1 022.3	820.9	1 831.6	59.1	55.9	732.8
PORTION IN MARYLAND . . . . .	716	213	22.0	230.8	12.3	23.9	104.5	381.8	378.0	746.7	16.0	19.4	257.9
PORTION IN DISTRICT OF COLUMBIA . . . . .	574	137	19.6	219.3	9.5	17.0	97.5	385.9	243.8	626.6	18.7	23.1	332.8
PORTION IN VIRGINIA . . . . .	431	125	13.2	136.0	7.2	13.7	57.6	254.6	199.1	458.3	24.4	13.4	142.1
WILMINGTON . . . . .	487	211	64.9	772.9	33.0	64.8	305.6	1 168.2	2 037.0	3 209.1	89.1	67.9	846.0
PORTION IN NEW JERSEY . . . . .	56	28	10.8	122.9	7.8	14.8	76.4	306.1	329.9	638.4	23.8	10.7	185.5
PORTION IN DELAWARE . . . . .	377	155	50.4	622.6	22.4	44.5	211.8	809.5	1 642.9	2 454.9	62.7	53.1	619.7
PORTION IN MARYLAND . . . . .	54	28	3.7	27.4	2.8	5.5	17.4	52.6	64.2	115.8	2.6	4.1	40.8
COUNTIES													
ALLEGANY . . . . .	73	28	10.4	103.7	7.7	16.3	74.1	182.2	162.9	345.8	27.0	11.3	200.4
ANNE ARUNDEL . . . . .	142	46	13.0	146.7	6.4	15.6	60.5	251.7	179.7	422.9	9.1	19.2	225.9
BALTIMORE . . . . .	409	186	55.1	572.6	36.8	72.0	336.3	1 085.0	915.2	1 991.1	63.2	68.3	930.3
CALVERT . . . . .	22	3	1.7	1.7	.2	.4	1.2	3.0	3.4	6.0	.2	.2	1.3
CAROLINE . . . . .	32	17	1.4	7.5	1.2	2.3	5.7	15.2	14.4	29.4	2.1	1.9	14.1
CARROLL . . . . .	95	41	7.9	60.4	6.2	12.0	43.1	132.9	101.7	233.5	6.4	7.7	99.3
CECIL . . . . .	54	28	3.7	27.4	2.8	5.5	17.4	52.6	64.2	115.8	2.6	4.1	40.8
CHARLES . . . . .	32	8	4	2.7	.3	.6	2.1	7.3	6.8	14.1	.4	.5	4.4
DORCHESTER . . . . .	89	35	4.5	24.6	3.8	6.8	18.3	57.0	76.8	133.1	2.8	4.1	39.4
FREDERICK . . . . .	72	40	5.9	42.0	4.5	8.2	27.7	104.9	116.2	220.1	6.7	5.8	72.5
GARRETT . . . . .	32	8	1.2	6.5	1.1	2.0	5.5	11.3	12.6	23.8	.8	.5	3.5
HARFORD . . . . .	60	25	4.9	33.0	3.6	6.3	19.4	47.6	38.2	88.0	3.4	5.2	56.7
HOWARD . . . . .	65	27	5.3	44.6	3.4	7.0	24.3	79.9	78.2	148.0	13.8	2.6	25.6
KENT . . . . .	25	8	.8	5.1	.6	1.2	3.4	8.3	21.8	29.9	1.0	1.4	6.9
MONTGOMERY . . . . .	363	100	11.6	128.1	5.4	10.6	46.1	183.4	136.2	311.9	6.0	9.3	113.4
PRINCE GEORGES . . . . .	321	105	10.0	100.0	6.6	12.7	56.3	191.1	235.0	420.7	9.6	9.6	140.1
QUEEN ANNES . . . . .	29	11	.7	3.5	.6	1.0	2.5	6.5	9.2	15.7	.9	.7	4.0
SOMERSET . . . . .	44	12	1.3	7.1	1.1	2.0	5.1	15.5	25.7	40.1	.8	1.5	10.1
TALBOT . . . . .	54	20	1.6	9.7	1.3	2.1	6.6	21.6	20.0	40.8	1.0	2.2	13.3
WASHINGTON . . . . .	131	69	12.5	115.8	9.5	20.0	80.0	239.9	170.0	411.3	7.5	15.5	159.8
WICOMICO . . . . .	95	40	6.1	37.9	4.8	9.1	25.5	75.2	156.1	231.0	7.6	6.1	66.8
WORCESTER . . . . .	50	17	3.1	16.0	2.7	4.8	12.8	32.7	98.3	131.9	2.3	3.0	30.0
BALTIMORE CITY . . . . .	1 219	523	89.9	844.2	63.6	124.7	537.9	1 856.4	2 629.7	4 485.0	134.4	106.7	1 521.0

<sup>1</sup>Some counties were withheld from publication in order to (a) avoid disclosing figures for individual companies or (b) permit further checking of the figures for smaller counties. Additional detail will appear in the final report for this State.

<sup>2</sup>Includes employment and payroll at central administrative offices and auxiliary units. (For a definition of these units, see appendix.)

<sup>3</sup>The total cost of materials and value of shipments may include extensive duplication arising from shipments between establishments in the same industry classification. (For a more complete explanation, see appendix.)

<sup>4</sup>The standard metropolitan statistical areas in this State are defined as follows:

BALTIMORE SMSA: Consists of Baltimore city and Anne Arundel, Baltimore, Carroll, Harford, and Howard Counties, MD.

WASHINGTON, DC-MD-VA, SMSA: Consists of the District of Columbia; Charles, Montgomery, and Prince Georges Counties, MD; and Alexandria, Fairfax, and Falls Church cities and Arlington, Fairfax, Loudoun, and Prince William Counties, VA.

WILMINGTON, DE-NJ-MD, SMSA: Consists of New Castle County, DE; Salem County, NJ; and Cecil County, MD.



TABLE 3. General Statistics for the State, by Industry Groups and Industries: 1972 and 1967

(See appendix, Explanation of Terms)

Code	Industry	1972										1967		
		Establishments		All employees		Production workers			Value added by manufacture	Cost of materials <sup>1</sup>	Value of shipments <sup>1</sup>	Capital expenditures, new	All employees	Value added by manufacture
		Total	With 20 employees or more	Number	Payroll	Number	Man-hours	Wages						
		(number)	(number)	(1,000)	(million dollars)	(1,000)	(million)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(1,000)	(million dollars)
	ALL INDUSTRIES, TOTAL <sup>2</sup> . . . . .	3 544	1 414	252.2	2 347.4	174.5	344.0	1 416.8	4 686.4	5 290.5	9 938.5	273.7	287.6	3 781.3
20	FOOD AND KINDRED PRODUCTS. . . . .	460	232	32.2	239.9	21.5	41.2	137.4	683.7	1 198.9	1 879.8	37.2	35.4	525.6
201	MEAT PRODUCTS. . . . .	61	35	7.7	49.9	6.2	11.2	35.9	83.6	310.8	394.4	4.3	7.6	69.3
2011	MEATPACKING PLANTS . . . . .	25	8	2.0	16.8	1.4	2.4	10.6	25.6	105.8	130.7	1.5	2.1	24.4
2016	POULTRY DRESSING PLANTS. . . . .	12	10	3.5	16.6	3.2	5.7	14.2	26.7	110.5	137.9	1.5	(NA)	(NA)
202	DAIRY PRODUCTS . . . . .	49	31	3.1	25.2	1.3	2.8	10.1	76.3	171.5	247.8	3.9	4.0	61.0
2024	ICE CREAM AND FROZEN DESSERTS. . . . .	15	8	.5	3.9	.3	.6	2.1	17.2	16.9	34.4	.5	.6	16.8
2026	FLUID MILK . . . . .	29	19	2.2	16.9	.8	1.7	6.4	52.9	119.9	172.7	2.8	3.1	41.0
203	PRESERVED FRUITS AND VEGETABLES. . . . .	72	33	3.7	19.2	3.2	5.8	14.7	57.7	80.5	138.4	4.9	(NA)	(NA)
2033	CANNED FRUITS AND VEGETABLES . . . . .	46	18	1.4	6.1	1.2	1.9	4.6	16.9	22.6	39.5	1.0	2.7	17.9
2035	PICKLES, SAUCES, AND SALAD DRESSINGS . . . . .	13	6	.7	3.6	.6	1.1	2.8	11.2	15.7	26.8	.9	.6	6.0
2037	FROZEN FRUITS AND VEGETABLES . . . . .	3	3	.3	1.4	.2	.4	1.0	2.4	2.9	5.3	.1	(NA)	(NA)
205	BAKERY PRODUCTS. . . . .	54	32	4.5	37.3	2.5	5.1	18.8	74.6	65.0	139.6	4.3	5.3	60.8
2065	CONFECTIONERY PRODUCTS . . . . .	20	7	.5	2.3	.4	.7	1.5	4.6	6.5	11.1	.3	88	(D)
207	FATS AND OILS. . . . .	10	6	.8	7.7	.5	1.1	3.4	29.1	72.1	101.3	1.5	(NA)	(NA)
208	BEVERAGES. . . . .	64	45	6.4	59.0	3.4	7.2	29.2	237.2	226.1	462.0	7.3	6.5	180.5
2082	MALT BEVERAGES . . . . .	6	5	1.6	17.0	1.1	2.2	10.3	48.5	48.7	97.1	2.7	2.0	48.2
2086	BOTTLED AND CANNED SOFT DRINKS . . . . .	42	30	3.0	24.2	1.1	2.2	7.1	71.8	93.7	165.4	3.3	2.7	42.2
209	MISC. FOODS AND KINDRED PRODUCTS . . . . .	112	37	4.4	28.2	3.3	5.8	16.5	76.0	121.1	195.7	8.4	(NA)	(NA)
2092	FRESH OR FROZEN PACKAGED FISH. . . . .	50	19	1.4	6.0	1.3	1.9	4.7	11.9	23.4	35.3	.7	1.7	7.2
2099	FOOD PREPARATIONS, NEC . . . . .	28	7	2.0	16.4	1.2	2.3	7.3	52.3	45.5	96.5	7.3	1.4	23.7
22	TEXTILE MILL PRODUCTS. . . . .	30	21	1.7	9.6	1.5	2.3	7.0	19.3	25.6	41.8	.9	2.6	21.1
23	APPAREL, OTHER TEXTILE PRODUCTS. . . . .	272	156	20.2	116.9	16.7	29.7	79.8	224.4	270.4	487.3	2.6	23.4	193.7
2311	MEN'S AND BOYS' SUITS AND COATS. . . . .	49	31	6.0	39.5	4.6	8.2	25.5	75.4	120.8	191.6	.7	8.2	76.2
232	MEN'S AND BOYS' FURNISHINGS. . . . .	61	42	4.3	23.0	3.6	6.4	14.7	41.7	53.8	95.4	.5	4.0	26.5
2321	MEN'S AND BOYS' SHIRTS AND NIGHTWEAR . . . . .	12	10	1.7	7.4	1.5	2.7	5.8	11.6	11.3	23.2	.1	1.2	8.1
2327	MEN'S AND BOYS' SEPARATE TROUSERS. . . . .	25	14	1.3	9.0	1.1	2.0	4.7	15.2	26.9	42.2	.2	1.2	8.4
2328	MEN'S AND BOYS' WORK CLOTHING. . . . .	11	9	.7	3.6	.6	1.1	2.3	9.6	8.8	17.8	.1	.9	5.3
233	WOMEN'S AND MISSES' OUTERWEAR . . . . .	62	41	4.4	20.4	4.0	6.6	16.4	36.9	15.7	51.8	.8	4.5	32.0
2335	WOMEN'S AND MISSES' DRESSES. . . . .	23	16	1.5	6.5	1.4	2.2	5.4	9.2	1.6	10.7	.2	2.0	9.5
2339	WOMEN'S & MISSES' OUTERWEAR, NEC . . . . .	24	14	1.1	5.1	.9	1.6	3.6	12.8	9.9	21.9	.3	1.0	8.4
236	CHILDREN'S OUTERWEAR . . . . .	10	9	.6	2.7	.5	.9	2.2	5.2	2.3	7.4	(Z)	.8	3.5
239	MISC. FABRICATED TEXTILE PRODUCTS. . . . .	71	19	1.7	11.5	1.4	2.7	7.6	18.9	25.2	44.1	.5	2.3	20.7
2394	CANVAS AND RELATED PRODUCTS. . . . .	17	4	.4	3.1	.2	.5	1.5	4.0	5.5	9.5	.1	.6	6.9
2396	AUTOMOTIVE AND APPAREL TRIMMINGS . . . . .	9	5	.4	2.5	.3	.6	1.7	4.2	10.7	14.8	.1	.4	2.9
24	LUMBER AND WOOD PRODUCTS . . . . .	293	62	5.4	35.8	4.3	7.9	25.3	71.1	86.8	156.7	5.2	(NA)	(NA)
242	SAWMILLS AND PLANING MILLS . . . . .	101	17	1.0	5.9	.9	1.6	4.9	12.5	16.2	28.5	.9	1.1	7.6
243	MILLWORK, PLYWOOD, STRUC. MEMBERS. . . . .	68	26	2.0	14.0	1.5	3.0	9.2	25.2	27.4	52.6	1.3	(NA)	(NA)
2431	MILLWORK . . . . .	39	14	1.0	7.7	.8	1.4	4.8	13.8	15.3	28.9	.7	(NA)	(NA)
2434	WOOD KITCHEN CABINETS. . . . .	19	8	.6	4.1	.5	1.0	2.9	7.3	6.7	14.0	.6	(NA)	(NA)
249	MISCELLANEOUS WOOD PRODUCTS. . . . .	37	6	.7	3.9	.6	1.0	2.9	6.3	14.1	20.4	1.6	(NA)	(NA)
25	FURNITURE AND FIXTURES . . . . .	89	36	3.5	24.9	2.8	5.4	17.2	37.8	36.3	73.9	3.0	5.0	38.8
251	HOUSEHOLD FURNITURE. . . . .	47	24	2.1	13.9	1.7	3.4	9.9	24.5	21.8	46.1	1.1	(NA)	(NA)
2511	WOOD HOUSEHOLD FURNITURE . . . . .	16	4	.6	4.4	.5	1.1	3.2	8.2	4.6	12.6	.1	(NA)	(NA)
2512	UPHOLSTERED HOUSEHOLD FURNITURE. . . . .	11	9	.8	4.8	.7	1.3	3.7	7.7	6.3	14.1	.4	(NA)	(NA)
2515	MATTRESSES AND BEDSPRINGS. . . . .	11	8	.4	3.1	.3	.6	1.9	5.4	7.9	13.3	.5	CC	(D)
259	MISC. FURNITURE AND FIXTURES . . . . .	9	4	1.0	7.0	.7	1.3	4.3	7.5	9.9	17.3	1.8	EE	(D)
26	PAPER AND ALLIED PRODUCTS. . . . .	82	53	9.7	83.0	7.1	15.6	55.5	157.7	181.1	337.1	22.6	11.1	133.6
264	MISC. CONVERTED PAPER PRODUCTS . . . . .	26	11	1.1	8.0	.9	1.8	4.9	16.3	13.8	29.8	1.2	1.0	10.8
2642	ENVELOPES. . . . .	7	4	.3	2.3	.2	.5	1.5	4.0	3.1	7.2	.4	.3	3.3
2643	BAGS, EXCEPT TEXTILE BAGS. . . . .	7	1	.4	2.8	.3	.7	1.6	5.9	5.4	11.0	(D)	(NA)	(NA)
265	PAPERBOARD CONTAINERS AND BOXES. . . . .	49	37	6.1	48.4	4.2	9.3	30.6	87.9	108.8	198.1	11.0	6.9	73.8
2653	CORRUGATED AND SOLID FIBER BOXES . . . . .	23	18	1.8	15.5	1.3	2.8	10.0	26.3	42.1	68.4	4.7	1.6	17.2
2654	SANITARY FOOD CONTAINERS . . . . .	8	7	2.9	21.2	1.7	4.3	13.0	45.0	51.0	97.9	4.8	FF	(D)
27	PRINTING AND PUBLISHING. . . . .	608	161	19.5	177.0	12.6	23.3	105.7	326.0	173.7	404.1	14.8	16.7	209.9
2711	NEWSPAPERS . . . . .	77	23	5.2	47.1	2.4	4.4	20.7	86.7	28.5	115.2	1.4	4.7	60.8
2721	PERIODICALS. . . . .	30	6	.8	7.5	.1	.2	.5	19.8	15.6	35.4	.2	.6	13.4
273	BOOKS. . . . .	42	20	2.5	23.1	1.8	3.3	16.1	45.7	28.5	72.5	2.3	2.3	27.7
2731	BOOK PUBLISHING. . . . .	18	3	.3	2.1	(Z)	.1	.3	9.1	3.8	11.4	.4	.3	3.0
2732	BOOK PRINTING. . . . .	24	17	2.2	21.0	1.7	3.2	15.8	36.5	24.7	61.1	1.5	2.0	24.7
275	COMMERCIAL PRINTING. . . . .	341	77	7.5	70.4	5.7	10.8	46.8	118.4	(Z)	194.9	5.8	(NA)	(NA)
2751	COMMERCIAL PRINTING, LETTERPRESS . . . . .	203	24	2.8	22.7	2.2	4.1	16.2	38.9	16.7	53.7	2.9	(NA)	(NA)
2761	MANIFOLD BUSINESS FORMS. . . . .	12	7	1.3	11.6	.9	1.9	7.0	27.1	23.3	50.0	3.8	EE	(D)
2789	BOOKBINDING AND RELATED WORK . . . . .	11	7	.6	4.6	.6	.9	3.8	7.3	1.9	9.2	.3	EE	(D)
279	PRINTING TRADE SERVICES. . . . .	63	15	.9	8.9	.7	1.3	6.5	14.3	2.7	16.9	.5	(NA)	(NA)
2791	TYPESETTING. . . . .	48	11	.7	6.9	.6	1.1	5.2	11.0	1.6	12.5	.4	.7	8.9
28	CHEMICALS AND ALLIED PRODUCTS. . . . .	173	94	14.2	132.2	9.6	20.3	79.1	423.7	390.8	818.4	56.4	17.6	422.5
281	INDUSTRIAL INORGANIC CHEMICALS . . . . .	20	13	2.6	24.3	1.7	3.8	16.0	63.7	68.4	133.9	8.8	(NA)	(NA)

See footnotes at end of table.

TABLE 3. General Statistics for the State, by Industry Groups and Industries: 1972 and 1967—Continued

(See appendix, Explanation of Terms)

Code	Industry	1972										1967		
		Establishments		All employees		Production workers			Value added by manufacture	Cost of materials <sup>1</sup>	Value of shipments <sup>1</sup>	Capital expenditures, new	All employees	Value added by manufacture
		Total	With 20 employees or more	Number	Payroll	Number	Man-hours	Wages						
		(number)	(number)	(1,000)	(million dollars)	(1,000)	(million)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(1,000)	(million dollars)
282	PLASTICS MATERIALS AND SYNTHETICS.	5	5	2.9	24.5	2.3	5.3	18.3	44.7	40.4	86.7	(D)	(NA)	(NA)
283	DRUGS.	23	8	1.1	8.2	.8	1.6	4.9	31.6	13.8	44.0	1.3	EE	(D)
284	SOAPS, CLEANERS, AND TOILET GOODS.	30	16	3.4	36.5	2.3	4.4	22.3	195.6	128.1	324.9	8.4	(NA)	(NA)
2842	POLISHES AND SANITATION GOODS.	21	9	.5	3.7	.3	.6	1.7	11.1	11.7	23.1	.7	(NA)	(NA)
2851	PAINTS AND ALLIED PRODUCTS . . . . .	27	18	1.6	14.7	.9	2.0	5.3	33.5	47.0	79.6	1.7	1.5	25.1
286	INDUSTRIAL ORGANIC CHEMICALS . . . .	12	5	.9	8.8	.5	1.1	4.4	21.3	46.0	68.7	(D)	(NA)	(NA)
287	AGRICULTURAL CHEMICALS . . . . .	23	8	.6	5.3	.4	.9	3.1	13.0	26.4	39.4	.9	(NA)	(NA)
289	MISCELLANEOUS CHEMICAL PRODUCTS . .	33	11	1.0	9.8	.6	1.3	4.8	20.3	20.7	41.2	1.5	(NA)	(NA)
2899	CHEMICAL PREPARATIONS, NEC . . . . .	22	8	.6	6.2	.4	.8	2.8	10.9	13.7	24.7	.6	(NA)	(NA)
29	PETROLEUM AND COAL PRODUCTS. . . .	35	14	1.2	10.6	.9	1.7	7.0	33.0	53.9	87.0	2.9	EE	(D)
295	PAVING AND ROOFING MATERIALS . . . .	26	9	.9	7.4	.7	1.3	5.1	22.2	26.3	48.6	2.0	.9	16.7
2951	PAVING MIXTURES AND BLOCKS . . . . .	21	6	.7	5.6	.5	1.0	3.8	15.9	17.0	32.9	1.2	.7	13.2
30	RUBBER AND MISC. PLASTICS PROD . . .	77	38	9.0	70.6	7.4	14.3	54.2	126.0	127.6	255.1	16.4	(NA)	(NA)
3079	MISCELLANEOUS PLASTICS PRODUCTS. . .	63	28	2.9	18.6	2.2	4.4	13.3	43.6	33.8	76.4	(D)	(NA)	(NA)
31	LEATHER AND LEATHER PRODUCTS . . .	21	15	2.2	12.1	1.9	3.7	9.3	25.0	21.4	46.5	.1	2.9	24.2
314	FOOTWEAR, EXCEPT RUBBER. . . . .	10	8	1.6	8.3	1.4	2.7	6.8	16.8	13.4	30.4	.1	1.9	17.4
32	STONE, CLAY, AND GLASS PRODUCTS.	200	87	10.6	101.0	8.4	17.1	75.9	236.4	164.4	400.4	14.0	10.3	160.7
325	STRUCTURAL CLAY PRODUCTS . . . . .	15	10	.7	6.1	.6	1.3	4.9	14.7	7.9	22.8	.9	.8	10.2
3255	CLAY REFRACTORIES. . . . .	4	4	.3	3.0	.3	.6	2.3	8.1	5.2	13.5	.6	.4	6.0
327	CONCRETE, GYPSUM, PLASTER PRODUCTS	142	55	4.0	37.3	2.9	5.5	24.0	92.0	88.9	180.5	6.6	3.4	56.3
3272	CONCRETE PRODUCTS, NEC . . . . .	57	21	1.6	13.4	1.4	2.8	10.1	31.4	17.6	49.0	3.0	1.3	19.1
3273	READY-MIXED CONCRETE . . . . .	53	16	1.4	14.8	.9	1.6	8.0	34.9	43.4	78.3	2.3	1.1	20.3
329	MISC. NONMETALLIC MINERAL PRODUCTS	16	10	1.5	12.8	1.2	2.6	10.5	26.7	21.7	49.3	2.7	(NA)	(NA)
3295	MINERALS, GROUND OR TREATED. . . . .	8	3	.3	2.7	.2	.5	2.0	8.9	4.4	12.8	1.1	BB	(D)
33	PRIMARY METAL INDUSTRIES . . . . .	55	26	29.5	340.2	22.8	43.7	244.6	626.0	710.4	1 334.5	56.0	36.9	524.6
331	BLAST FURNACE, BASIC STEEL PROD. . .	15	12	23.7	272.2	18.3	34.4	193.5	445.8	445.8	922.0	(D)	FF	(D)
332	IRON AND STEEL FOUNDRIES . . . . .	9	4	.5	4.1	.5	.8	3.3	8.2	5.0	12.6	.5	.8	7.7
34	FABRICATED METAL PRODUCTS. . . . .	287	122	13.8	124.5	10.6	20.3	88.0	253.0	294.8	546.2	17.2	(NA)	(NA)
341	METAL CANS AND SHIPPING CONTAINERS	15	15	3.8	42.6	3.3	6.7	35.1	76.5	132.4	208.0	9.4	(NA)	(NA)
344	FABRICATED STRUCTURAL METAL PROD . .	148	64	5.6	47.6	3.7	6.9	28.0	100.7	99.7	198.7	3.6	5.8	74.7
3441	FABRICATED STRUCTURAL METAL PRODUCTS	35	22	1.7	15.3	1.3	2.3	9.8	26.0	33.1	58.5	1.7	1.3	14.7
3442	METAL DOORS, SASH, AND TRIM. . . . .	18	5	.6	4.2	.4	.7	1.8	8.3	8.1	16.6	(D)	.8	12.3
3443	FABRICATED PLATEWORK (BOILER SHOP) .	17	7	.4	3.9	.3	.6	2.5	8.5	8.3	17.0	.4	.5	4.2
3444	SHEET METALWORK. . . . .	40	17	1.5	13.7	1.0	1.9	8.1	26.0	28.5	54.4	.9	1.1	16.0
346	METAL FORGINGS AND STAMPINGS . . . .	12	4	.4	2.6	.3	.6	1.8	5.8	4.1	10.0	.3	(NA)	(NA)
347	METAL SERVICES, NEC. . . . .	41	9	.7	5.5	.5	1.0	4.0	9.6	6.7	16.2	1.1	.5	6.0
3479	METAL COATING AND ALLIED SERVICES.	20	5	.4	3.7	.3	.7	2.7	6.6	5.9	12.3	1.0	.3	3.0
349	MISC. FABRICATED METAL PRODUCTS. . .	42	18	1.6	13.3	1.3	2.5	9.4	33.8	31.6	66.2	2.2	(NA)	(NA)
3496	MISC. FABRICATED WIRE PRODUCTS . . .	14	5	.5	3.9	.3	.7	2.3	8.4	5.6	13.9	.2	(NA)	(NA)
3499	FABRICATED METAL PRODUCTS, NEC . . .	24	11	.9	8.0	.8	1.5	5.8	22.6	23.2	47.0	1.8	(NA)	(NA)
35	MACHINERY, EXCEPT ELECTRICAL . . .	299	90	19.4	200.8	13.9	29.0	131.2	398.9	312.5	690.0	17.3	15.9	202.3
355	SPECIAL INDUSTRY MACHINERY . . . . .	38	18	3.1	31.6	2.0	4.2	18.7	56.6	43.1	96.6	.9	3.7	48.6
3551	FOOD PRODUCTS MACHINERY. . . . .	15	7	1.0	9.8	.7	1.5	6.9	19.3	19.9	38.0	.3	1.3	16.6
3559	SPECIAL INDUSTRY MACHINERY, NEC. . .	10	6	1.4	14.6	.8	1.7	7.2	25.9	12.8	38.0	.5	1.5	17.4
356	GENERAL INDUSTRIAL MACHINERY . . . .	19	9	1.8	17.5	1.2	2.4	9.9	37.3	38.1	73.7	.9	EE	(D)
357	OFFICE AND COMPUTING MACHINES. . . .	14	8	.9	9.5	.6	1.2	5.5	13.7	7.8	19.5	.6	BB	(D)
358	REFRIGERATION, SERVICE MACHINERY . .	19	13	2.7	24.6	1.9	3.6	14.3	66.5	48.1	107.3	4.2	2.1	27.1
359	MISC. MACHINERY, EXCEPT ELECTRICAL	166	30	3.1	28.8	2.3	4.8	19.4	47.4	18.0	63.9	3.1	(NA)	(NA)
36	ELECTRIC, ELECTRONIC EQUIPMENT . . .	138	70	27.7	313.9	14.8	31.7	133.6	508.9	383.8	873.0	23.6	(NA)	(NA)
361	ELECTRIC DISTRIBUTING EQUIPMENT. . .	12	6	1.1	8.3	.9	1.6	4.8	14.3	9.0	23.5	.8	(NA)	(NA)
362	ELECTRICAL INDUSTRIAL APPARATUS. . .	8	4	1.1	8.0	.9	1.8	5.7	13.1	21.0	34.3	.5	1.3	21.0
363	HOUSEHOLD APPLIANCES . . . . .	5	4	1.8	15.8	1.5	3.2	11.9	23.8	33.6	57.3	4.9	AA	(D)
364	ELECT. LIGHTING AND WIRING EQUIP. . .	12	6	.3	2.1	.2	.4	1.3	4.9	7.0	11.9	.2	AA	(D)
366	COMMUNICATION EQUIPMENT. . . . .	48	29	21.5	265.6	9.9	22.0	101.6	429.1	298.9	708.6	16.3	24.1	271.9
367	ELECTRONIC COMPONENTS AND ACCESS.	30	14	1.2	9.4	.9	1.6	5.2	17.1	8.3	25.2	.5	2.9	23.3
369	MISC. ELECTRICAL EQUIP., SUPPLIES.	17	6	.6	4.1	.5	.9	2.9	5.7	4.7	10.2	.4	EE	(D)
37	TRANSPORTATION EQUIPMENT . . . . .	108	31	17.2	193.9	13.1	26.9	138.5	432.5	800.6	1 243.9	14.1	(NA)	(NA)
3713	TRUCK AND BUS BODIES . . . . .	11	4	.3	2.1	.2	.4	1.4	4.0	4.6	8.2	.1	.2	1.5
3714	MOTOR VEHICLE PARTS AND ACCESSORIES.	13	5	.6	4.1	.5	.9	3.1	8.5	7.7	16.3	.3	FF	(D)
38	INSTRUMENTS AND RELATED PRODUCTS	86	25	2.9	24.0	2.0	3.8	12.5	50.8	23.4	71.2	2.2	(NA)	(NA)
3811	ENGINEERING, SCIENTIFIC INSTRUMENTS.	21	6	.7	5.6	.4	.8	2.8	14.6	7.5	19.8	.7	1.0	9.9
384	MEDICAL INSTRUMENTS AND SUPPLIES . .	23	3	.3	2.1	.2	.4	1.2	3.7	2.2	5.9	.7	.6	5.3
39	MISC. MANUFACTURING INDUSTRIES . . .	126	36	3.4	23.1	2.6	5.2	15.1	46.4	33.7	77.4	2.2	4.4	42.3
391	JEWELRY, SILVERWARE, PLATED WARE . .	6	3	.4	2.8	.3	.5	1.6	5.4	2.5	7.7	.2	.3	4.5
394	TOYS AND SPORTING GOODS. . . . .	19	6	.7	3.7	.5	1.0	2.8	11.8	7.7	18.1	1.1	1.0	11.0
3944	GAMES, TOYS, AND CHILDREN'S VEHICLES	9	4	.5	2.8	.4	.8	2.2	9.1	6.1	14.1	(D)	(NA)	(NA)
399	MISCELLANEOUS MANUFACTURES . . . . .	75	24	1.9	13.7	1.5	3.0	9.0	24.2	21.9	45.2	.9	2.2	20.8
3991	BROOMS AND BRUSHES . . . . .	6	5	.9	5.4	.7	1.5	3.8	9.9	12.4	21.9	.5	1.2	10.8
3993	SIGNS AND ADVERTISING DISPLAYS . . .	34	11	.6	4.9	.4	.8	3.2	7.3	3.9	11.2	.2	.6	6.5
--	ADMINISTRATIVE AND AUXILIARY . . . .	104	55	9.1	113.4	-	-	-	-	-	-	-	6.4	-

Note: The following symbols indicate employment size range for 1967:

AA less than 250 employees      EE 1,000 to 2,499 employees  
BB 250 to 499 employees      FF 2,500 employees and over  
CC 500 to 999 employees

- Represents zero. (NA) Not available. Because of a revision to this industry or industry group in the 1972 edition of the SIC manual, 1967 census data are not available on a comparable basis. (D) Withheld to avoid disclosing figures for individual companies. (Z) Less than half of the unit of measurement shown.

<sup>1</sup>The total cost of materials and value of shipments for industry groups shown may include extensive duplication arising from shipments between establishments in the same industry classification. (For a more complete explanation, see appendix.)

<sup>2</sup>Includes figures for industry groups which have been withheld from publication in order to (a) avoid disclosing figures for individual companies or (b) permit further checking of figures for smaller industry groups. Additional detail will appear in the final report for this State.



## Appendix A. SCOPE AND COVERAGE

This report is one of a series presenting preliminary information, by State, from the 1972 Census of Manufactures. The data will be superseded in a final report which, in turn, will be included in *Volume III, Area Statistics, 1972 Census of Manufactures*. The final report will include a comprehensive discussion of the concepts and definitions used in the census.

The census of manufactures covers each manufacturing establishment in the United States with one paid employee or more; manufacturing establishments with no employees are excluded. Firms which operated more than one establishment were required to file a separate report for each location. Companies which engaged in distinctly different lines of activity at one location were asked to submit separate reports if the company records permitted such a separation and the activities were of significant size.

This report includes figures for administrative offices, warehouses, garages, or other auxiliary units which service manufacturing establishments.

In the 1972 census, the approximately 120,000 manufacturing establishments with fewer than 10 employees were excused from filing reports. Under special arrangements which safeguarded the confidentiality of both tax and census records, data on payrolls, sales, and industry classification from the administrative records of the Social Security Administration and the Internal Revenue Service were made available to the Census Bureau for use in the 1972 Economic Censuses (retail and wholesale trade, service industries, construction industries, manufactures, and mineral industries). Estimates for data other than payrolls and sales for these small establishments were constructed from industry averages. The effect on industry aggregates is slight in most industries. For manufacturing as a whole, these small establishments account for less than 3 percent of the payrolls and value added.

Establishments are classified by industry in accordance with industry definitions described in the 1972 edition of the Standard Industrial Classification (SIC) Manual. For 1972, the SIC was significantly revised and the comparability with prior year's data for some industries was significantly affected. The comparability at the 2- and 3-digit SIC levels was less affected. The final volumes of the 1972 Census of Manufactures will contain a table relating aggregates based on the 1972 SIC with aggregates derived from classifying establishments according to the 1967 SIC definitions.

As in earlier censuses, a number of small establishments may have been misclassified as to industry. However, such possible misclassifications have significant effect on *none* of the statistics except the number of establishments. As indicated above, report forms were not mailed to very small establishments (fewer than 10 employees). The industry classifications for these establishments were assigned on the basis of brief descriptions of the general activity of the establishment. Where the description is incomplete or there are relatively fine lines of demarcation among industries or between manufacturing and nonmanufacturing activity, the code assigned to an establishment could differ from that which would have been assigned on the basis of more complete product information. Therefore, the total establishment count for individual industries should be viewed as an approximation rather than a precise measurement. The counts for establishments with 20 employees or more are more reliable than the total number of establishments.

More detailed figures for this State will appear in the final census reports. Final reports will also include a comprehensive discussion of such concepts as "industry" and "establishment," as well as the various statistical items such as "employment," "value of shipments," and "value added." Similar preliminary and final reports will be issued for other States during the coming months. A series of preliminary summary reports showing U.S. totals for each manufacturing industry and for each State are being issued. Final industry reports and final area reports will be published during 1974.

Order forms describing the individual reports and listing their prices may be obtained from any U.S. Department of Commerce district office or from the Publications Distribution Section, Social and Economic Statistics Administration, Washington, D.C. 20233.

The 1972 Census of Manufactures is the 29th census of manufacturing establishments in the United States. For 1972, it was conducted jointly with the censuses of mineral industries, construction industries, retail trade, wholesale trade, and selected services under authority of Title 13 of the United States Code. Title 13 specifies that a census of manufactures be conducted every 5 years and, as amended, to cover years ending in "2" and "7". Title 13 also authorizes an annual sample survey of manufacturing establishments in interim years.



## Appendix B. EXPLANATION OF TERMS

*(For a more complete discussion of these terms and the method of compiling the Census of Manufactures, see the "Introduction" to the 1967 Census of Manufactures, Volume III).*

**All Employees**—All full-time and part-time employees on the payrolls of operating manufacturing establishments for any part of the pay period ending nearest the 12th of the months specified on the report form. Included are all persons on paid sick leave, paid holidays, and paid vacations during these pay periods. Officers of corporations are included as employees; proprietors and partners of unincorporated firms are excluded. The "all employee" number is the average number of production workers for the midmonth payroll period of March, May, August, and November plus the number of nonproduction employees in mid-March.

**Number of Production Workers**—Workers (up through the working foreman level) engaged in fabricating, processing, assembling, inspecting, receiving, packing, warehousing, shipping (but not delivering), and maintenance, repair, janitorial, and watchman services, product development, auxiliary production for plant's own use (e.g., powerplant), recordkeeping, and other closely associated services. Proprietors and partners are excluded.

**Payroll**—This item includes all forms of compensation such as salaries, wages, commissions, dismissal pay, bonuses, vacation and sick leave pay, and compensation in kind, prior to such deductions as employees' Social Security contributions, withholding taxes, group insurance, union dues, and savings bonds. The total includes salaries of officers of these establishments, if a corporation; it excludes payments to the proprietor or partners, if an unincorporated concern. Respondents were told that in reporting they could follow the definition of payrolls used for calculating the Federal withholding tax.

**Man-Hours of Production Workers**—This total relates to production-worker man-hours worked or paid for at the plant including actual overtime hours (not straight-time equivalent hours). It excludes hours paid for vacation, holidays, or sick leave when the employee was not at the plant.

**Cost of Materials**—The term "Cost of Materials" refers to charges actually paid or payable for items consumed or put into production during the year, including freight and other direct charges incurred by the establishment in acquiring these materials. It includes the cost of materials or fuel consumed regardless of

whether these items were purchased by the establishment from other companies, transferred to it from other establishments of the same company, or withdrawn from inventory during the year. The establishment was requested to value materials transferred from other parts of the company at its approximate market value, not at cost of production. The important components of this cost item are (a) all raw materials, semifinished goods, parts, components, containers, scrap, and supplies put into production or used as operating supplies and for repair and maintenance during the year; (b) electric energy purchased; (c) fuels consumed for heat, power, or the generation of electricity; (d) work done by others on materials or parts furnished by manufacturing establishments (contract work); and (e) products bought and resold in the same condition.

**Value of Shipments**—The value of shipments is the received or receivable net selling value, f.o.b. plant (exclusive of freight and taxes), of all products shipped, both primary and secondary, as well as all miscellaneous receipts such as receipts for contract work performed for others, installation and repair, sales of scrap, and sale of products bought and resold without further processing. Included are all items made by the establishment or for it under contract from materials owned by it whether sold, transferred to other plants of the same company, or shipped on consignment. The net selling value of products made in one plant on a contract basis from materials owned by another was reported by the plant providing the materials.

In the case of multiunit companies, the manufacturer was requested to report the value of products transferred to other establishments of the same company at full economic value; i.e., to include not only the direct costs of production but also a reasonable proportion of "all other costs" (including company overhead) and profit.

**Duplication in Cost of Materials and Value of Products**—The aggregate cost of materials and value-of-shipments figures for industry groups and for all manufacturing industries may include large amounts of duplication since the products of some industries are used as materials by others. With some important exceptions, such as motor vehicles and parts, this duplication is not significant within individual industries but arises from the addition of the totals of related industries in successive stages of the production of a finished manufactured product. Examples are the addition of flour mills to bakeries in the food group and the addition of pulp mills to paper mills in the paper and allied products group of industries. Esti-



mates of this duplication indicate that the value of manufactured products exclusive of such duplication—the value of finished manufactures—approximates two-thirds of the total value of products.

Prior to 1962, the Bureau of the Census did not publish figures for cost of materials or value of shipments if they contained significant duplication. Effective with the 1962 annual survey these figures were shown at all industry levels for the United States to meet the requests for their use in studies in which the presence of an indeterminate amount of duplication is not a limiting factor. However, they are appropriately footnoted. Effective with the 1964 annual survey, these industry group totals are also shown at the State, standard metropolitan statistical area, and large-county level.

Even where there is no significant amount of duplication, value-of-shipments figures are deficient as measures of the relative economic importance of individual manufacturing industries or geographic areas because of the wide variation in ratio of materials, labor, and other processing costs to value of shipments among industries.

**Value Added by Manufacture**—This measure of manufacturing activity is derived by subtracting the cost of materials, supplies, containers, fuel, purchased electricity, and cost of resales contract work from the value of shipments for products manufactured plus resales and receipts for services rendered. The result of this calculation is adjusted by the net change in finished goods and work-in-process inventories between the beginning and end of the year. (In the few industries that report value of production rather than value of shipments, only changes in work-in-process inventories are used to adjust value added. In the shipbuilding and repairing industry, no inventory adjustment is made.)

“Value added” avoids the duplication in the value of shipments figure which results from the use of products of some establishments as materials by others. Value added is considered to be the best value measure available for comparing the relative economic importance of manufacturing among industries and geographic areas.

**Expenditures for Plant and Equipment**—Manufacturing establishments in operation and establishments under construction but not yet in operation, were asked to report their expenditures for (a) permanent additions and major alterations to the manufacturing establishment, and (b) new machinery and equipment used for replacement purposes and additions to plant capacity if they are of the type for which depreciation accounts are ordinarily maintained.

These totals exclude expenditures for new facilities and equipment leased from nonmanufacturing concerns; new facilities owned by the Federal Government but operated under contract by private companies; and plant and equipment furnished to the manufacturer by communities and nonprofit organizations. Expenditures for used plant and equipment (although reported in the census), expenditures for land, and cost of maintenance and repairs charged as current operating expense are also omitted from the figures for new capital expenditures.

**Central Administrative Offices and Auxiliary Units**—In the 1972 census as in previous years, respondents were asked to file separate reports for central administrative offices or auxiliary units which were (1) at different locations from the establishments served or, (2) at the same location as one of these establishments but were not operated as an integral part thereof and served two or more establishments. The functions of employees in central administrative offices include general company policy determination, planning and management (that is, company purchasing, accounting, general engineering, direction of company personnel matters, and legal and patent matters). Auxiliaries are storage facilities, garages, repair shops, purchasing offices, sales promotion offices, and research laboratories serving the plants or central management of the company.

**Standard Metropolitan Statistical Areas**—Standard metropolitan statistical areas (SMSA) are integrated economic and social units with a large volume of daily travel and communication between the central city and outlying parts of the area.<sup>1</sup> Each area (except in New England) consists of one whole county or more. An area may contain not only highly industrialized counties but also adjoining counties which, though primarily residential in character, contribute significantly to the industrial counties' labor force and are socially and economically integrated with the central city. These areas are defined by the Federal Committee on Standard Metropolitan Statistical Areas of the Office of Management and Budget for general-purpose use throughout the Federal Government in presenting economic and social data. In the New England States, similar intergration criteria are applied in defining

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<sup>1</sup> Each standard metropolitan statistical area must include either (1) a city with 50,000 or more inhabitants, or (2) a city having a population of at least 25,000 which (a) with the addition of the population of contiguous places has a population density of at least 1,000 persons per square mile; (b) constitutes, for general economic and social purposes, a single community with a combined population of at least 50,000; and (c) includes a total population of at least 75,000 in the county or counties in which the city and contiguous places are located.

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## PRELIMINARY REPORT

**1972 CENSUS OF  
MANUFACTURES**

## AREA SERIES

72(P)-S22

U. S. DEPARTMENT OF COMMERCE • Social and Economic Statistics Administration • BUREAU OF THE CENSUS

ued April 1974

**Massachusetts**

Value added by manufacturing in 1972 in the State of Massachusetts amounted to \$10,722 million, a 13-percent increase from 1971 and a 23-percent increase from 1967.

This report presents preliminary results from the 1972 Census of Manufactures for the State, its Standard Metropolitan Statistical Areas, and its counties.

Data are provided for industry groups within the State. Historical data, back to 1958, are included for the State as a whole,

and 1967 figures on employment and value added are provided for the smaller areas.

The figures in this report have been subjected to only preliminary review and must be regarded as approximations of the final census figures. No adjustments have been made in the value figures for changes in price level.

For an explanation of the terms used in the tables, see the appendix at the end of this report.

TABLE 1. General Statistics for the State: 1972 and Earlier Years

(See appendix, Explanation of Terms)

Year	Establishments		All employees <sup>1</sup>		Production workers			Value added by manufacture	Cost of materials <sup>2</sup>	Value of shipments <sup>2</sup>	Capital expenditures, new
	Total	With 20 employees or more	Number	Payroll	Number	Man-hours	Wages				
	(number)	(number)	(1,000)	(million dollars)	(1,000)	(millions)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(million dollars)
MASSACHUSETTS											
1972 Census .....	10,703	4,119	613.4	5,445.4	410.3	802.1	2,985.7	10,721.5	8,564.5	19,139.4	534.5
1971 ASM .....	(NA)	(NA)	616.5	5,109.3	407.8	784.0	2,755.1	9,494.6	7,572.3	17,110.0	454.3
1970 ASM .....	(NA)	(NA)	672.8	5,214.2	454.2	879.5	2,880.7	9,628.2	7,608.9	17,177.6	618.1
1969 ASM .....	(NA)	(NA)	709.7	5,170.8	492.9	970.4	2,956.0	9,572.4	7,882.6	17,364.1	197.3
1968 ASM .....	(NA)	(NA)	703.2	4,861.4	492.4	971.3	2,833.4	9,035.0	7,366.6	16,367.7	110.8
1967 Census .....	10,963	4,471	713.6	4,646.3	507.9	999.0	2,755.3	8,715.0	7,294.4	15,925.5	493.7
1966 ASM .....	(NA)	(NA)	705.2	4,415.2	503.9	1,004.9	2,620.1	8,378.2	7,305.0	15,488.3	489.8
1965 ASM .....	(NA)	(NA)	673.7	3,999.3	485.9	967.6	2,419.6	7,449.8	6,755.3	14,067.2	342.8
1964 ASM .....	(NA)	(NA)	667.6	3,808.2	478.5	952.4	2,281.1	6,821.2	6,146.2	12,870.2	308.0
1963 Census .....	11,311	4,351	674.0	3,712.4	480.7	948.3	2,234.6	6,403.8	(NA)	(NA)	273.0
1962 ASM .....	(NA)	(NA)	717.7	3,737.5	518.6	1,023.2	2,289.3	6,522.4	(NA)	(NA)	287.2
1961 ASM .....	(NA)	(NA)	715.5	3,595.2	516.8	1,015.5	2,185.3	6,223.3	(NA)	(NA)	277.0
1960 ASM .....	(NA)	(NA)	719.0	3,487.5	522.8	1,025.8	2,135.3	6,037.4	(NA)	(NA)	288.7
1959 ASM .....	(NA)	(NA)	717.3	3,390.4	524.2	1,036.1	2,107.4	5,901.8	(NA)	(NA)	269.9
1958 Census .....	11,565	4,377	680.6	3,070.8	498.1	968.7	1,932.0	5,128.5	(NA)	(NA)	228.5

Note: "ASM" data are based on a representative sample of manufacturing establishments canvassed in the Annual Survey of Manufactures. These estimates may differ from the results of a complete canvass of all manufacturing establishments. The standard errors associated with these estimates are published in the annual survey of manufactures volumes for this period. For comparative purposes, the 1972 ASM estimate for the State of Massachusetts was 596 thousand employees, and \$10,312 million in value added with corresponding standard error of estimate of 1 and 1.

(NA) Not available.

<sup>1</sup>Includes employment and payroll at central administrative offices and auxiliary units. (For a definition of these units, see appendix.)

<sup>2</sup>The total cost of materials and value of shipments may include extensive duplication arising from shipments between establishments in the same industry classification. (For a more complete explanation, see appendix.)

TABLE 2. General Statistics for the State, Standard Metropolitan Statistical Areas, and Counties: 1972 and 1967

(See appendix, Explanation of Terms)

State, standard metropolitan statistical areas, and counties <sup>1</sup>	1972											1967	
	Establishments		All employees <sup>2</sup>		Production workers			Value added by manufac- ture	Cost of materials <sup>3</sup>	Value of shipments <sup>3</sup>	Capital expendi- tures, new	All employees	Value added by manufac- ture
	Total	With 20 employees or more	Number	Payroll	Number	Man-hours	Wages						
	(number)	(number)	(1,000)	(million dollars)	(1,000)	(million)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(1,000)	(million dollars)
MASSACHUSETTS, TOTAL . . . . .	10 703	4 119	613.4	5 445.4	410.3	802.1	2 985.7	10 721.5	8 564.5	19 139.4	534.5	713.6	8 715.0
STANDARD METROPOLITAN STATISTICAL AREAS <sup>4</sup>													
BOSTON . . . . .	5 178	1 837	265.0	2 587.7	159.4	309.8	1 245.7	4 977.8	3 991.6	8 926.8	227.3	316.2	4 155.5
BROCKTON . . . . .	297	133	13.2	96.1	9.9	18.2	59.7	177.3	160.8	335.1	7.5	16.5	157.0
FALL RIVER . . . . .	325	190	25.2	173.3	20.1	36.5	113.0	354.5	285.1	634.5	19.1	21.3	154.2
PORTION IN MASSACHUSETTS . . . . .	307	186	22.6	144.8	18.6	34.1	102.4	290.8	246.8	534.6	(D)	21.3	153.8
PORTION IN RHODE ISLAND . . . . .	18	4	2.6	28.5	1.5	2.4	10.6	63.7	38.3	99.9	(D)	(2)	.4
FITCHBURG-LEOMINSTER . . . . .	288	116	16.1	136.7	11.6	24.2	85.4	255.4	258.1	510.0	17.6	18.3	210.7
LAWRENCE-HAVERHILL . . . . .	522	209	36.7	316.2	26.4	49.3	179.8	692.9	526.1	1 196.8	46.0	39.9	435.4
PORTION IN NEW HAMPSHIRE . . . . .	48	14	1.5	10.8	1.1	1.8	6.5	19.9	20.8	39.9	1.6	.6	5.6
PORTION IN MASSACHUSETTS . . . . .	474	195	35.2	305.4	25.3	47.5	173.3	673.0	505.3	1 156.9	44.4	39.3	429.8
LOWELL . . . . .	333	148	23.4	187.3	17.3	33.2	117.7	487.4	311.6	797.2	20.6	22.6	287.7
NEW BEDFORD . . . . .	307	147	24.0	168.5	19.0	35.5	116.1	330.0	289.9	611.8	18.8	25.1	214.5
PITTSFIELD . . . . .	116	50	16.4	175.1	8.8	18.8	80.2	277.2	172.5	449.1	17.4	16.9	262.9
PROVIDENCE-WARWICK-PAWTUCKET . . . . .	2 960	971	130.9	984.7	101.2	197.3	629.5	2 043.5	1 816.0	3 821.4	114.2	138.0	1 533.9
PORTION IN MASSACHUSETTS . . . . .	316	126	20.3	163.3	15.4	31.7	97.4	286.6	305.1	575.0	10.3	22.7	266.3
PORTION IN RHODE ISLAND . . . . .	2 644	845	110.6	821.4	85.8	165.6	532.1	1 756.9	1 510.9	3 246.4	103.9	115.3	1 267.6
SPRINGFIELD-CHICOPEE-HOLYOKE . . . . .	997	394	62.1	525.9	44.8	90.0	340.2	1 141.6	944.5	2 072.5	54.8	73.3	947.7
WORCESTER . . . . .	800	310	43.3	372.6	30.5	59.3	222.1	694.7	503.3	1 190.8	35.4	50.9	602.9
COUNTIES													
BARNSTABLE . . . . .	141	22	2.0	14.8	1.3	2.4	7.8	28.1	29.3	57.5	2.7	1.1	12.5
BERKSHIRE . . . . .	205	73	20.3	203.7	11.5	23.9	97.1	311.8	205.3	518.5	18.8	23.9	320.0
BRISTOL . . . . .	1 026	506	73.7	528.5	58.2	111.8	350.0	1 027.5	940.8	1 939.6	43.6	78.0	747.9
ESSEX . . . . .	1 283	480	78.5	725.3	53.0	101.0	389.7	1 429.6	1 110.2	2 498.5	75.9	93.7	1 056.3
FRANKLIN . . . . .	104	37	5.8	48.3	4.4	8.5	31.5	102.7	84.5	189.2	3.4	7.6	89.0
HAMPDEN . . . . .	886	351	54.7	463.2	39.7	78.9	305.5	989.0	821.7	1 795.8	48.4	64.8	839.9
HAMPSHIRE . . . . .	162	62	8.6	70.7	6.2	13.4	43.4	163.5	148.7	313.0	8.8	10.1	122.1
MIDDLESEX . . . . .	2 521	991	151.8	1 474.3	90.0	175.7	687.9	2 930.9	2 264.0	5 151.9	158.7	165.8	2 187.3
NORFOLK . . . . .	841	285	48.4	457.6	30.4	60.0	244.7	804.2	536.7	1 330.8	45.8	58.2	687.4
PLYMOUTH . . . . .	530	206	19.4	149.4	14.6	27.6	96.2	263.6	224.0	487.9	12.3	20.5	201.2
SUFFOLK . . . . .	1 545	523	65.3	592.8	40.4	77.8	295.0	1 317.2	1 164.4	2 488.1	44.5	84.5	1 241.0
WORCESTER . . . . .	1 446	587	88.5	739.4	62.6	126.3	457.5	1 409.4	1 047.8	2 430.4	71.4	105.3	1 209.8

(D) Withheld to avoid disclosing figures for individual companies. (2) Less than half of the unit of measurement shown.

<sup>1</sup>Some counties were withheld from publication in order to (a) avoid disclosing figures for individual companies or (b) permit further checking of the figures for smaller counties. Additional detail will appear in the final report for this State.<sup>2</sup>Includes employment and payroll at central administrative offices and auxiliary units. (For a definition of these units, see appendix.)<sup>3</sup>The total cost of materials and value of shipments may include extensive duplication arising from shipments between establishments in the same industry classification. (For a more complete explanation, see appendix.)<sup>4</sup>The standard metropolitan statistical areas in this State are defined as follows:

BOSTON SMSA: Consists of Beverly, Lynn, Peabody, and Salem cities, and Boxford, Danvers, Hamilton, Lynnfield, Manchester, Marblehead, Middleton, Nahant, Saugus, Swampscott, Topsfield, and Wenham towns in Essex County; Cambridge, Everett, Malden, Medford, Melrose, Newton, Somerville, Waltham, and Woburn cities, and Acton, Arlington, Ashland, Bedford, Belmont, Boxborough, Burlington, Carlisle, Concord, Framingham, Holliston, Lexington, Lincoln, Natick, North Reading, Reading, Sherborn, Stoneham, Sudbury, Wakefield, Watertown, Wayland, Weston, Wilmington, and Winchester towns in Middlesex County; Quincy city, and Bellingham, Braintree, Brookline, Canton, Cohasset, Dedham, Dover, Foxborough, Franklin, Holbrook, Medfield, Medway, Millis, Milton, Needham, Norfolk, Norwood, Randolph, Sharon, Stoughton, Walpole, Wellesley, Westwood, Weymouth, and Wrentham towns in Norfolk County; Abington, Duxbury, Hanover, Hanson, Hingham, Hull, Kingston, Marshfield, Norwell, Pembroke, Rockland, and Scituate towns in Plymouth County; and Boston, Chelsea, and Revere cities, and Winthrop town in Suffolk County, MA.

BROCKTON SMSA: Consists of Easton town in Bristol County; Avon town in Norfolk County; and Brockton city and Bridgewater, East Bridgewater, Halifax, West Bridgewater, and Whitman towns in Plymouth County, MA.

FALL RIVER, MA-RI, SMSA: Consists of Fall River city, and Dighton, Somerset, Swansea, and Westport towns in Bristol County, MA; and Little Compton, Portsmouth, and Tiverton towns in Newport County, RI.

FITCHBURG-LEOMINSTER SMSA: Consists of Shirley and Townsend towns in Middlesex County; and Fitchburg and Leominster cities, and Lunenburg and Westminster towns in Worcester County, MA.

LAWRENCE-HAVERHILL, MA-NH, SMSA: Consists of Lawrence and Haverhill cities, and Amesbury, Andover, Georgetown, Groveland, Merrimac, Methuen, North Andover, Salisbury, and West Newbury towns in Essex County, MA; and Atkinson, Hampstead, Kingston, Newton, Plaistow, Salem, and Windham towns in Rockingham County, NH.

LOWELL, MA-NH, SMSA: Consists of Lowell city, and Billerica, Chelmsford, Dracut, Tewksbury, Tyngsborough, Westford, Towns in Middlesex County, MA; and Pelham town in Hillsborough County, NH.

NEW BEDFORD SMSA: Consists of New Bedford city, and Acushnets, Dartmouth, Fairhaven, and Freetown towns in Bristol County, and Lakeville, Marion, and Mattapoisett towns in Plymouth County, MA.

PITTSFIELD SMSA: Consists of Pittsfield city, and Adams, Cheshire, Dalton, Lanesborough, Lee, Lenox, and Stockbridge towns in Berkshire County, MA.

PROVIDENCE-WARWICK-PAWTUCKET, RI-MA, SMSA: Consists of Barrington, Bristol County, RI; Warwick city, and Coventry, East Greenwich, and West Warwick towns in Kent County, RI; Jamestown town in Newport County, RI; Central Falls, Cranston, East Providence, Pawtucket, Providence, and Woonsocket cities, and Burrillville, Cumberland, Johnston, Lincoln, North Providence, North Smithfield, Scituate, and Smithfield towns in Providence County, RI; and Narragansett, North Kingstown, and South Kingstown towns in Washington County, RI; and Attleboro city, and North Attleborough, Norton, Rehobeth, and Seekonk towns in Bristol County, MA; Plainville town in Norfolk County, MA; and Blackstone and Millville towns in Worcester County, MA.

SPRINGFIELD-CHICOPEE-HOLYOKE, MA-CT, SMSA: Consists of Chicopee, Holyoke, Springfield, and Westfield cities, and Agawam, East Longmeadow, Hampden, Longmeadow, Ludlow, Monson, Palmer, Southwick, West Springfield, and Wilbraham towns in Hampden County, MA; Northampton city, and Belchertown, Easthampton, Granby, Hatfield, South Hadley, South Hampton towns in Hampshire County, MA; and Warren town in Worcester County, MA; and Somers town in Tolland County, CT.

WORCESTER SMSA: Consists of Worcester city, and Auburn, Berlin, Boylston, Brookfield, Charlton, East Brookfield, Leicester, Millbury, Northborough, Northbridge, North Brookfield, Oxford, Paxton, Shrewsbury, Spencer, Sterling, Sutton, Upton, Uxbridge, Webster, Westborough, and West Boylston towns in Worcester County, MA.



TABLE 3. General Statistics for the State, by Industry Groups and Industries: 1972 and 1967

(See appendix, Explanation of Terms)

Code	Industry	1972											1967	
		Establishments		All employees		Production workers			Value added by manufacture	Cost of materials <sup>1</sup>	Value of shipments <sup>1</sup>	Capital expenditures, new	All employees	Value added by manufacture
		Total	With 20 employees or more	Number	Payroll	Number	Man-hours	Wages	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(1,000)	(million dollars)
		(number)	(number)	(1,000)	(million dollars)	(1,000)	(million)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(1,000)	(million dollars)
	ALL INDUSTRIES, TOTAL <sup>2</sup> . . . . .	10 703	4 119	613.4	5 445.4	410.3	802.1	2 985.7	10 701.5	8 564.5	10 130.4	534.5	713.6	8 715.0
20	FOOD AND KINDRED PRODUCTS. . . . .	739	291	32.0	265.1	20.2	39.5	144.4	626.0	1 250.8	1 876.9	30.7	37.8	564.4
201	MEAT PRODUCTS. . . . .	78	30	3.8	37.0	2.8	5.6	25.8	75.1	258.6	331.6	2.3	4.3	60.9
2013	SAUSAGES AND OTHER PREPARED MEATS. . . . .	58	26	3.4	34.3	2.5	5.0	23.8	69.4	231.0	298.2	2.2	3.6	52.7
202	DAIRY PRODUCTS. . . . .	146	56	5.5	47.1	2.4	4.9	19.4	132.8	269.8	404.0	7.5	6.5	124.2
2024	ICE CREAM AND FROZEN DESSERTS. . . . .	46	18	1.9	17.1	1.1	2.0	7.9	45.9	80.8	126.3	4.0	1.5	40.9
2026	FLUID MILK. . . . .	93	36	3.5	28.8	1.2	2.6	10.5	87.2	179.0	265.8	(0)	4.9	82.0
203	PRESERVED FRUITS AND VEGETABLES. . . . .	49	20	1.4	9.0	1.1	2.0	6.4	25.8	45.9	71.8	1.0	(NA)	(NA)
2033	CANNED FRUITS AND VEGETABLES. . . . .	40	8	.6	4.0	.4	.8	2.7	12.7	24.4	37.1	.5	.6	11.1
204	GRAIN MILL PRODUCTS. . . . .	18	6	.6	4.0	.4	.8	2.6	11.4	33.4	44.9	.5	.8	20.6
205	BAKERY PRODUCTS. . . . .	153	50	6.8	59.5	4.0	8.0	30.7	124.2	106.1	230.2	4.8	8.3	108.9
206	SUGAR AND CONFECTIONERY PRODUCTS. . . . .	49	25	4.6	31.2	3.6	6.8	21.6	72.0	161.8	236.0	2.7	(NA)	(NA)
2065	CONFECTIONERY PRODUCTS. . . . .	43	20	3.4	19.4	2.7	5.0	13.8	47.9	62.9	111.7	1.2	FF	(D)
207	FATS AND OILS. . . . .	12	6	.5	4.2	.2	.4	1.8	10.8	11.9	22.7	.9	(NA)	(NA)
208	BEVERAGES. . . . .	100	40	4.0	36.7	2.0	4.0	14.7	87.0	164.0	250.8	5.6	4.7	71.9
2086	BOTTLED AND CANNED SOFT DRINKS. . . . .	77	26	2.5	22.3	1.0	2.1	6.8	57.7	101.6	159.3	4.2	3.1	43.5
209	MISC. FOODS AND KINDRED PRODUCTS. . . . .	134	53	4.9	36.3	3.7	7.1	21.4	86.7	199.2	284.9	5.2	(NA)	(NA)
2092	FRESH OR FROZEN PACKAGED FISH. . . . .	42	27	2.5	16.2	2.2	4.2	11.7	36.3	122.2	157.7	1.6	2.4	32.9
2095	ROASTED COFFEE. . . . .	8	5	.3	2.6	.2	.3	1.2	6.1	14.3	20.4	.3	.4	6.7
2099	FOOD PREPARATIONS, NEC. . . . .	56	18	1.6	12.4	1.0	1.6	6.2	32.3	42.4	74.7	1.9	1.6	21.6
22	TEXTILE MILL PRODUCTS. . . . .	328	199	29.2	212.4	23.9	48.8	149.7	418.2	508.7	921.2	31.6	34.3	326.1
2221	WEAVING MILLS, SYNTHETICS. . . . .	17	13	3.1	23.4	2.7	5.7	17.7	53.3	59.9	108.7	2.7	3.1	23.8
2231	WEAVING AND FINISHING MILLS, WOOL. . . . .	28	20	2.8	20.5	2.3	4.7	14.6	36.1	31.2	68.0	.6	4.8	54.0
2241	NARROW FABRIC MILLS. . . . .	29	13	1.4	8.4	1.2	2.3	6.2	15.8	12.1	27.7	.4	2.1	16.1
225	KNITTING MILLS. . . . .	45	35	6.5	43.5	5.7	10.4	29.5	90.1	108.9	206.4	4.8	6.8	54.6
2253	KNIT OUTERWEAR MILLS. . . . .	17	12	2.5	15.5	2.0	3.5	9.1	28.0	37.3	65.9	.7	2.8	20.0
2257	CIRCULAR KNIT FABRIC MILLS. . . . .	10	15	3.6	25.9	3.0	6.2	18.9	57.3	75.8	132.3	3.9	(NA)	(NA)
226	TEXTILE FINISHING, EXCEPT WOOL. . . . .	51	36	6.2	47.4	5.1	11.0	34.3	84.7	88.3	173.7	7.0	5.6	60.8
2269	FINISHING PLANTS, NEC. . . . .	13	7	.5	2.5	.4	.8	1.8	4.3	5.6	9.9	.3	EE	(D)
228	YARN AND THREAD MILLS. . . . .	34	24	1.8	11.4	1.6	3.0	8.6	17.1	20.5	37.0	.6	3.3	24.3
2281	YARN MILLS, EXCEPT WOOL. . . . .	9	7	.6	3.9	.6	1.1	3.5	5.1	10.3	14.9	(2)	1.0	6.0
2283	WOOL YARN MILLS. . . . .	11	7	.3	1.8	.3	.6	1.5	2.6	1.6	4.2	.1	1.2	8.2
2284	THREAD MILLS. . . . .	10	7	.6	4.2	.5	.9	2.5	7.3	6.2	13.4	.3	.7	6.9
2293	PADDINGS AND UPHOLSTERY FILLING. . . . .	8	3	.3	2.1	.2	.5	1.7	3.8	3.1	6.8	(D)	BB	(D)
2295	COATED FABRICS, NOT RUBBERIZED. . . . .	28	22	2.8	23.9	1.9	4.2	15.5	52.4	81.1	132.9	7.7	2.4	32.1
2298	CORDAGE AND TWINE. . . . .	10	5	.3	1.7	.2	.4	1.1	5.1	3.6	8.6	.2	.5	4.9
23	APPAREL, OTHER TEXTILE PRODUCTS. . . . .	843	466	46.7	260.0	40.3	71.2	192.2	528.7	505.2	1 026.3	10.3	55.2	405.1
2311	MEN'S AND BOYS' SUITS AND COATS. . . . .	60	35	6.5	41.0	5.7	10.7	32.4	79.7	67.4	143.3	1.8	7.3	57.1
232	MEN'S AND BOYS' FURNISHINGS. . . . .	60	26	3.6	18.8	3.1	5.4	14.1	42.6	68.4	111.9	.7	5.4	37.0
2323	MEN'S AND BOYS' NECKWEAR. . . . .	10	7	.4	1.8	.3	.6	1.0	4.5	3.0	7.7	.1	.3	2.3
2329	MEN'S AND BOYS' CLOTHING, NEC. . . . .	27	12	1.4	7.5	1.3	2.2	6.0	12.5	9.7	22.4	.3	2.3	16.2
2331	WOMEN'S, MISSES' BLOUSES, WAISTS. . . . .	25	14	.9	3.7	.8	1.4	3.2	6.2	3.7	10.1	.1	1.4	7.3
2335	WOMEN'S AND MISSES' DRESSES. . . . .	161	111	10.4	52.3	9.3	15.0	41.8	100.8	72.2	172.5	1.5	12.3	87.9
2342	BRASSIERES AND ALLIED GARMENTS. . . . .	8	5	.5	3.1	.5	.9	2.2	5.1	3.4	8.5	(D)	CC	(D)
236	CHILDREN'S OUTERWEAR. . . . .	31	22	2.2	11.3	1.9	3.4	8.8	21.2	31.3	51.5	.2	2.7	20.6
238	MISC. APPAREL AND ACCESSORIES. . . . .	61	33	3.1	17.8	2.7	4.9	13.4	31.6	30.7	61.2	.6	4.3	30.1
2385	WATERPROOF OUTERGARMENTS. . . . .	27	17	1.4	7.6	1.2	2.1	5.6	13.9	7.8	21.8	.2	2.8	20.1
2386	LEATHER AND SHEEP LINED CLOTHING. . . . .	11	5	.6	3.9	.5	1.1	3.2	7.9	8.6	15.2	.3	EE	(D)
239	MISC. FABRICATED TEXTILE PRODUCTS. . . . .	226	82	8.4	46.8	6.8	12.5	30.6	85.9	100.1	185.1	2.5	9.3	67.4
2391	CURTAINS AND DRAPERIES. . . . .	62	33	3.5	16.6	3.0	5.4	12.2	30.6	38.9	68.4	.8	3.9	21.0
2392	HOUSEFURNISHINGS, NEC. . . . .	35	15	1.5	9.7	1.1	2.2	5.5	16.5	25.8	42.1	.5	2.0	17.8
2396	AUTOMOTIVE AND APPAREL TRIMMINGS. . . . .	23	8	1.3	10.0	.9	1.8	5.2	23.2	19.2	42.8	.6	1.4	14.6
2399	FABRICATED TEXTILE PRODUCTS, NEC. . . . .	30	8	.7	3.5	.7	1.1	2.8	5.2	6.1	11.3	.3	.3	2.6
24	LUMBER AND WOOD PRODUCTS. . . . .	395	76	5.9	44.5	4.6	8.9	29.8	80.5	87.4	167.4	3.6	(NA)	(NA)
242	SAWMILLS AND PLANING MILLS. . . . .	97	7	.7	4.9	.5	1.1	3.6	8.4	10.3	18.7	(D)	.6	6.6
2421	SAWMILLS AND PLANING MILLS, GENERAL. . . . .	78	5	.5	3.5	.3	.7	2.4	6.5	8.7	15.2	(D)	.6	6.0
243	MILLWORK, PLYWOOD, STRUC. MEMBERS. . . . .	104	24	1.6	12.8	1.2	2.2	8.1	20.7	26.6	46.9	.8	(NA)	(NA)
2431	MILLWORK. . . . .	58	10	1.0	7.4	.7	1.4	4.7	11.9	19.1	30.8	.4	(NA)	(NA)
2434	WOOD KITCHEN CABINETS. . . . .	34	4	.4	4.0	.3	.6	2.4	6.1	4.3	10.4	(D)	(NA)	(NA)
244	WOOD CONTAINERS. . . . .	32	7	.5	2.9	.4	.8	2.2	5.1	5.3	10.4	.3	(NA)	(NA)
245	WOOD BUILDINGS AND MOBILE HOMES. . . . .	9	9	.5	5.6	.4	.7	3.0	11.5	18.3	29.3	(D)	(NA)	(NA)
25	FURNITURE AND FIXTURES. . . . .	291	111	9.3	68.0	7.3	14.4	46.2	120.5	104.1	223.3	3.6	10.6	99.1
251	HOUSEHOLD FURNITURE. . . . .	200	87	7.3	49.5	6.0	11.7	35.3	90.0	84.1	172.8	3.0	(NA)	(NA)
2511	WOOD HOUSEHOLD FURNITURE. . . . .	91	30	3.4	22.7	2.7	5.5	16.4	38.4	30.0	68.1	1.2	(NA)	(NA)
2512	UPHOLSTERED HOUSEHOLD FURNITURE. . . . .	48	30	2.1	13.9	1.7	3.5	10.3	25.1	21.9	46.3	.8	(NA)	(NA)

See footnotes at end of table.

TABLE 3. General Statistics for the State, by Industry Groups and Industries: 1972 and 1967—Continued

(See appendix, Explanation of Terms)

Code	Industry	1972											1967	
		Establishments		All employees		Production workers			Value added by manufacture	Cost of materials <sup>1</sup>	Value of shipments <sup>1</sup>	Capital expenditures, new	All employees	Value added by manufacture
		Total	With 20 employees or more	Number	Payroll	Number	Man-hours	Wages						
		(number)	(number)	(1,000)	(million dollars)	(1,000)	(million)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(1,000)	(million dollars)
2515	MATTRESSES AND BEDSPRINGS. . . . .	37	12	.8	5.8	.6	1.1	3.5	12.3	15.9	28.3	.2	1.1	11.6
254	PARTITIONS AND FIXTURES. . . . .	53	12	.9	8.9	.7	1.5	5.9	13.8	9.8	23.7	.4	1.3	13.7
2541	WOOD PARTITIONS AND FIXTURES. . . . .	41	8	.5	5.3	.4	.8	3.7	7.4	5.9	13.4	.2	.8	8.8
2542	METAL PARTITIONS AND FIXTURES. . . . .	12	4	.5	3.6	.3	.7	2.2	6.4	3.9	10.3	.2	.5	4.8
259	MISC. FURNITURE AND FIXTURES. . . . .	22	8	.4	3.8	.3	.7	2.8	6.8	4.2	10.8	.2	EE	(D)
2599	FURNITURE AND FIXTURES, NEC. . . . .	10	5	.3	2.8	.2	.5	2.2	4.7	2.3	6.8	.1	.3	3.4
26	PAPER AND ALLIED PRODUCTS. . . . .	340	211	28.6	252.9	21.7	46.3	170.4	470.2	499.4	969.8	34.6	35.2	441.2
2621	PAPERMILLS, EXCEPT BUILDING PAPER. . . . .	36	33	6.7	71.0	4.9	11.9	48.8	114.6	140.0	255.6	10.8	9.4	128.5
264	MISC. CONVERTED PAPER PRODUCTS. . . . .	153	71	11.2	93.9	8.3	17.2	61.0	187.0	199.9	387.7	13.6	14.3	189.7
2641	PAPER COATING AND GLAZING. . . . .	42	22	3.5	32.8	2.4	5.4	19.4	53.4	75.7	131.5	5.7	3.4	49.4
2643	BAGS, EXCEPT TEXTILE BAGS. . . . .	17	9	1.1	8.3	.8	1.8	5.8	19.7	19.0	38.4	1.5	1.0	13.0
2647	SANITARY PAPER PRODUCTS. . . . .	5	4	1.5	11.7	1.2	2.3	8.5	36.5	32.8	68.4	3.1	1.2	19.0
2648	STATIONERY PRODUCTS. . . . .	46	12	1.8	14.0	1.4	2.7	9.1	25.4	15.1	40.6	1.1	(NA)	(NA)
2649	CONVERTED PAPER PRODUCTS, NEC. . . . .	15	9	.8	7.0	.6	1.3	4.1	13.8	17.6	31.3	.6	(NA)	(NA)
265	PAPERBOARD CONTAINERS AND BOXES. . . . .	138	97	9.8	78.7	7.8	15.5	53.1	151.0	150.5	299.5	8.6	10.2	103.7
2651	FOLDING PAPERBOARD BOXES. . . . .	24	16	2.1	16.4	1.7	3.5	12.1	32.1	30.5	62.2	1.3	2.3	24.5
2653	CORRUGATED AND SOLID FIBER BOXES. . . . .	48	32	4.0	36.4	3.0	6.1	22.9	62.3	77.7	139.9	4.5	3.9	44.1
2654	SANITARY FOOD CONTAINERS. . . . .	14	8	.8	6.0	.7	1.5	4.4	14.0	14.3	27.6	.5	1.1	11.8
27	PRINTING AND PUBLISHING. . . . .	1 386	337	43.8	405.3	26.2	49.5	220.9	812.4	326.7	1 138.0	35.7	44.7	589.2
2711	NEWSPAPERS. . . . .	187	67	13.1	127.5	5.8	11.0	59.2	248.3	68.4	316.7	10.0	13.6	173.9
273	BOOKS. . . . .	84	28	7.0	65.7	3.7	7.6	31.7	172.9	72.8	252.0	7.7	8.3	169.6
2731	BOOK PUBLISHING. . . . .	51	15	3.1	28.8	.3	.8	2.0	113.9	49.8	170.6	4.7	2.8	114.7
2732	BOOK PRINTING. . . . .	33	13	3.9	36.9	3.3	6.7	29.7	59.0	22.9	81.5	3.0	5.5	54.9
275	COMMERCIAL PRINTING. . . . .	752	144	12.4	108.7	9.5	18.0	75.7	185.7	100.7	282.9	12.0	(NA)	(NA)
2751	COMMERCIAL PRINTING, LETTERPRESS. . . . .	455	59	4.6	38.3	3.7	7.0	27.3	71.5	40.4	111.3	5.4	(NA)	(NA)
2752	COMMERCIAL PRINTING, LITHOGRAPHIC. . . . .	272	76	6.9	63.3	5.2	9.7	43.4	100.2	53.8	152.4	5.8	(NA)	(NA)
2753	ENGRAVING AND PLATE PRINTING. . . . .	21	7	.7	5.7	.5	1.0	3.8	11.7	5.1	15.7	(D)	(NA)	(NA)
2771	GREETING CARD PUBLISHING. . . . .	18	10	2.4	18.4	1.5	2.6	10.0	39.0	20.6	57.4	1.2	2.4	29.9
278	BLANKBOOKS AND BOOKBINDING. . . . .	71	28	3.5	24.4	2.9	5.4	18.3	48.1	23.1	70.2	1.7	3.9	33.7
2782	BLANKBOOKS AND LOOSELEAF BINDERS. . . . .	26	13	2.4	16.6	2.0	3.6	12.4	37.2	20.4	56.7	1.1	2.7	24.2
2789	BOOKBINDING AND RELATED WORK. . . . .	45	15	1.1	7.8	.9	1.7	5.9	10.9	2.7	13.5	.6	1.2	9.5
279	PRINTING TRADE SERVICES. . . . .	110	28	1.8	18.4	1.3	2.5	13.2	27.5	5.9	32.6	1.0	(NA)	(NA)
2791	TYPESETTING. . . . .	72	22	1.3	13.2	1.0	1.8	9.5	19.8	3.6	22.6	.9	1.0	11.0
28	CHEMICALS AND ALLIED PRODUCTS. . . . .	349	115	16.3	172.1	9.2	18.9	85.1	586.1	495.1	1 088.4	33.2	17.0	367.1
281	INDUSTRIAL INORGANIC CHEMICALS. . . . .	18	11	1.5	15.4	.8	1.7	7.8	45.5	23.4	69.9	2.8	(NA)	(NA)
282	PLASTICS MATERIALS AND SYNTHETICS. . . . .	21	20	5.1	57.7	3.0	6.1	30.2	130.8	164.5	298.5	11.5	(NA)	(NA)
283	DRUGS. . . . .	31	6	.9	8.0	.5	.9	3.0	23.3	8.2	31.7	.8	.9	16.8
284	SOAPS, CLEANERS, AND TOILET GOODS. . . . .	99	24	3.7	41.4	2.2	4.6	20.0	255.5	160.9	416.0	7.9	(NA)	(NA)
2842	POLISHES AND SANITATION GOODS. . . . .	54	13	.8	7.9	.4	.8	3.0	20.5	23.1	43.8	.9	(NA)	(NA)
2851	PAINTS AND ALLIED PRODUCTS. . . . .	52	21	1.5	12.2	.7	1.4	5.7	35.6	31.8	67.8	1.0	1.6	29.1
286	INDUSTRIAL ORGANIC CHEMICALS. . . . .	19	6	.6	5.4	.4	.8	3.1	22.9	17.9	42.5	2.6	(NA)	(NA)
2899	CHEMICAL PREPARATIONS, NEC. . . . .	50	5	.5	5.4	.2	.5	1.9	14.9	14.0	28.9	(D)	(NA)	(NA)
295	PAVING AND ROOFING MATERIALS. . . . .	43	8	1.1	11.7	.8	1.8	8.0	32.2	42.2	74.5	4.9	EE	(D)
30	RUBBER AND MISC. PLASTICS PROD. . . . .	468	245	32.5	255.4	25.2	49.7	171.4	574.0	455.5	1 013.9	41.0	(NA)	(NA)
3069	FABRICATED RUBBER PRODUCTS, NEC. . . . .	63	42	8.9	77.6	6.5	13.4	50.2	148.6	99.6	248.7	8.1	(NA)	(NA)
3079	MISCELLANEOUS PLASTICS PRODUCTS. . . . .	386	191	18.0	128.8	14.4	28.0	84.8	282.3	247.0	527.2	28.9	(NA)	(NA)
31	LEATHER AND LEATHER PRODUCTS. . . . .	382	193	28.1	182.6	24.0	43.1	130.5	295.2	347.2	645.1	9.5	45.2	360.9
3111	LEATHER TANNING AND FINISHING. . . . .	129	54	4.0	32.5	3.3	6.1	22.0	55.1	119.0	172.5	1.9	5.9	60.8
3131	BOOT, SHOE CUT STOCK, FINDINGS. . . . .	89	46	3.0	18.9	2.5	4.4	13.0	33.3	47.2	80.4	.8	5.4	46.4
314	FOOTWEAR, EXCEPT RUBBER. . . . .	102	78	18.4	113.1	16.1	28.9	84.9	171.7	157.9	335.0	6.1	30.0	221.1
32	STONE, CLAY, AND GLASS PRODUCTS. . . . .	312	93	12.1	121.7	8.3	16.5	71.9	253.2	169.6	420.6	16.6	12.5	181.5
327	CONCRETE, GYPSUM, PLASTER PRODUCTS. . . . .	170	43	3.7	37.9	2.7	5.7	25.6	78.0	68.7	146.4	8.7	3.2	52.7
3272	CONCRETE PRODUCTS, NEC. . . . .	75	17	2.0	18.2	1.6	3.3	13.1	35.0	22.8	57.8	4.8	.9	11.7
3273	READY-MIXED CONCRETE. . . . .	62	18	1.1	14.2	.8	1.6	9.1	29.4	33.4	62.6	3.1	1.5	27.8
329	MISC. NONMETALLIC MINERAL PRODUCTS. . . . .	73	36	7.1	71.6	4.6	8.8	38.8	149.6	86.0	233.1	5.8	(NA)	(NA)
3291	ABRASIVE PRODUCTS. . . . .	27	20	5.8	60.3	3.7	7.0	32.9	127.1	69.2	194.0	4.6	6.5	95.8
33	PRIMARY METAL INDUSTRIES. . . . .	229	114	14.0	125.0	11.3	23.7	91.9	239.7	321.8	550.0	12.1	22.8	312.9
331	BLAST FURNACE, BASIC STEEL PROD. . . . .	28	18	2.9	29.4	2.2	4.7	20.4	50.8	58.2	103.3	2.3	5.0	64.8
3315	STEEL WIRE AND RELATED PRODUCTS. . . . .	21	14	2.5	24.9	2.0	4.0	17.4	39.5	39.7	77.5	1.0	3.0	37.1

See footnotes at end of table.



TABLE 3. General Statistics for the State, by Industry Groups and Industries: 1972 and 1967—Continued

(See appendix, Explanation of Terms)

Code	Industry	1972										1967		
		Establishments		All employees		Production workers			Value added by manufacture	Cost of materials <sup>1</sup>	Value of shipments <sup>1</sup>	Capital expenditures, new	All employees	Value added by manufacture
		Total	With 20 employees or more	Number	Payroll	Number	Man-hours	Wages	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(1,000)	(million dollars)
		(number)	(number)	(1,000)	(million dollars)	(1,000)	(million)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(1,000)	(million dollars)
332	IRON AND STEEL FOUNDRIES . . . . .	38	28	2.6	21.3	2.4	4.6	17.8	34.9	17.5	51.6	(0)	3.6	33.9
335	NONFERROUS ROLLING AND DRAWING . .	49	34	6.2	54.1	5.0	10.9	39.6	116.8	198.5	305.7	6.0	8.1	133.8
3356	NONFERROUS ROLLING, DRAWING, NEC . .	9	4	1.0	9.0	.7	1.7	6.1	23.0	96.3	113.4	.8	1.3	19.1
3357	NONFERROUS WIRE DRAWING, INSULATING .	28	22	4.0	34.5	3.3	7.2	25.9	75.2	75.9	147.9	4.6	5.5	96.5
336	NONFERROUS FOUNDRIES . . . . .	61	17	1.2	10.0	1.0	2.0	7.6	16.1	14.1	29.9	.6	1.3	15.8
3361	ALUMINUM FOUNDRIES . . . . .	31	8	.5	4.6	.4	.9	3.3	7.2	3.9	11.1	.3	.6	7.2
3362	BRASS, BRONZE, AND COPPER FOUNDRIES .	25	7	.5	4.0	.4	.8	3.2	6.4	9.0	15.2	.2	.5	5.7
34	FABRICATED METAL PRODUCTS . . . . .	1 123	409	45.5	392.6	34.5	69.5	267.9	829.4	548.1	1 360.5	33.8	(NA)	(NA)
341	METAL CANS AND SHIPPING CONTAINERS . .	10	7	.8	8.2	.6	1.4	6.3	21.1	35.6	55.5	.9	(NA)	(NA)
3411	METAL CANS . . . . .	6	6	.7	7.9	.6	1.3	6.1	20.1	35.1	54.0	(0)	CC	(D)
342	CUTLERY, HANDTOOLS AND HARDWARE . .	95	48	8.9	72.0	7.0	14.0	50.8	240.0	100.3	335.2	(0)	10.8	228.3
343	PLUMBING, HEATING, EXC. ELECTRICAL . .	23	8	.9	7.3	.6	1.2	4.8	15.7	13.6	28.8	(0)	(NA)	(NA)
344	FABRICATED STRUCTURAL METAL PROD . .	342	106	7.8	73.9	5.8	11.7	48.8	133.9	122.0	253.2	6.7	8.1	100.4
3441	FABRICATED STRUCTURAL METAL PRODUCTS	61	26	2.5	27.3	1.8	3.8	17.9	47.4	45.5	92.1	2.7	1.8	23.4
3442	METAL DOORS, SASH, AND TRIM . . . . .	45	17	1.3	9.2	.9	1.9	5.9	18.0	18.5	36.3	.4	1.2	10.9
3443	FABRICATED PLATEWORK (BOILER SHOP) . .	47	19	1.0	10.2	.7	1.6	6.7	18.4	17.8	35.6	1.8	1.8	23.0
3444	SHEET METALWORK . . . . .	142	35	2.5	22.4	1.9	3.7	15.3	39.9	25.1	63.9	1.4	2.8	34.9
345	SCREW MACHINE PRODUCTS, BOLTS, ETC .	113	45	4.6	38.0	3.5	7.3	25.5	69.3	38.4	106.1	2.4	6.8	80.6
3451	SCREW MACHINE PRODUCTS . . . . .	89	32	2.2	17.8	1.8	3.7	12.8	29.6	16.8	45.3	1.1	2.7	30.3
3452	BOLTS, NUTS, RIVETS, AND WASHERS . .	24	13	2.4	20.2	1.7	3.5	12.7	39.8	21.6	60.9	1.3	4.1	50.2
346	METAL FORGINGS AND STAMPINGS . . . .	135	67	8.6	79.9	6.8	13.6	56.0	136.7	108.2	240.8	7.1	(NA)	(NA)
3469	METAL STAMPINGS, NEC . . . . .	120	55	4.3	35.7	3.5	6.8	24.9	59.8	45.0	103.4	5.2	(NA)	(NA)
347	METAL SERVICES, NEC . . . . .	203	48	2.8	20.2	2.3	4.4	14.2	34.6	14.7	49.2	1.5	3.2	31.4
3471	PLATING AND POLISHING . . . . .	120	32	1.9	13.1	1.5	3.0	9.2	23.4	10.1	33.3	1.1	2.2	22.4
3479	METAL COATING AND ALLIED SERVICES . .	83	16	.9	7.1	.8	1.5	4.9	11.2	4.6	15.8	.5	1.0	9.0
348	ORDNANCE AND ACCESSORIES, NEC . . . .	13	8	3.8	29.9	2.8	5.8	23.9	51.7	21.7	71.2	(0)	(NA)	(NA)
349	MISC. FABRICATED METAL PRODUCTS . . .	189	74	7.4	63.1	5.1	10.1	37.7	126.4	93.6	220.5	(0)	(NA)	(NA)
3494	VALVES AND PIPE FITTINGS . . . . .	36	21	3.9	36.2	2.3	5.0	20.3	79.1	54.3	134.1	3.7	5.3	76.9
3499	FABRICATED METAL PRODUCTS, NEC . . . .	83	23	1.6	13.3	1.2	2.4	8.7	23.9	16.3	39.5	1.3	(NA)	(NA)
35	MACHINERY, EXCEPT ELECTRICAL . . . .	1 515	414	73.4	732.3	45.3	91.4	390.7	1 740.3	826.2	2 523.0	77.0	78.7	1 237.8
3535	CONVEYORS AND CONVEYING EQUIPMENT . .	13	4	.3	2.7	.2	.3	1.4	4.9	3.6	9.4	.1	.3	3.6
354	METALWORKING MACHINERY . . . . .	396	102	14.4	145.7	10.2	20.8	92.5	266.5	97.2	363.2	8.5	19.2	275.2
3544	SPECIAL DIES, TOOLS, JIGS, FIXTURES . .	267	58	3.7	38.5	3.0	6.5	28.8	66.5	24.4	89.5	3.8	4.0	50.8
3545	MACHINE TOOL ACCESSORIES . . . . .	66	24	6.1	59.0	4.4	9.0	39.8	108.5	32.3	141.1	2.3	7.5	110.3
3549	METALWORKING MACHINERY, NEC . . . . .	19	7	.5	4.7	.4	.6	2.6	10.1	6.3	16.3	.7	(NA)	(NA)
355	SPECIAL INDUSTRY MACHINERY . . . . .	221	90	17.0	165.0	10.1	20.6	85.3	305.8	196.2	495.1	14.1	21.4	247.7
3552	TEXTILE MACHINERY . . . . .	65	27	4.8	42.3	3.1	6.6	24.5	68.1	56.0	121.4	2.8	8.0	69.3
3554	PAPER INDUSTRIES MACHINERY . . . . .	32	19	1.9	19.7	1.1	2.2	10.2	31.0	24.2	54.5	1.0	2.8	37.5
3555	PRINTING TRADES MACHINERY . . . . .	29	11	2.2	22.3	1.4	2.7	9.3	46.4	28.7	76.8	2.8	1.6	19.4
3559	SPECIAL INDUSTRY MACHINERY, NEC . . . .	71	30	6.6	66.2	3.7	7.4	34.0	130.5	71.0	197.3	5.9	7.8	100.8
356	GENERAL INDUSTRIAL MACHINERY . . . . .	148	53	7.5	73.0	5.0	10.1	41.7	143.8	86.4	225.6	7.7	9.7	129.4
3564	BLOWERS AND FANS . . . . .	11	4	.8	7.5	.6	1.3	5.3	14.1	8.6	22.7	.3	1.2	14.5
357	OFFICE AND COMPUTING MACHINES . . . .	86	46	17.9	178.5	8.5	17.2	65.3	693.5	266.7	935.3	36.4	FF	(D)
3573	ELECTRONIC COMPUTING EQUIPMENT . . . .	65	37	15.6	157.4	7.3	14.7	57.2	637.6	234.2	848.7	33.8	FF	(D)
358	REFRIGERATION, SERVICE MACHINERY . . .	47	20	2.6	25.6	1.5	3.1	13.2	53.2	27.8	79.3	1.1	2.4	39.1
3585	REFRIGERATION AND HEATING EQUIPMENT .	20	9	.9	8.9	.5	1.0	3.8	20.7	10.3	30.2	.7	(NA)	(NA)
3589	SERVICE INDUSTRY MACHINERY, NEC . . . .	17	4	.9	9.2	.5	1.0	4.4	18.6	11.3	29.2	.2	1.2	18.2
359	MISC. MACHINERY, EXCEPT ELECTRICAL .	542	73	5.2	49.1	4.1	8.5	35.4	80.0	32.1	110.6	3.5	(NA)	(NA)
36	ELECTRONIC, ELECTRONIC EQUIPMENT . . .	599	305	77.9	720.7	52.1	102.4	393.2	1 315.8	840.8	2 142.5	70.3	(NA)	(NA)
361	ELECTRIC DISTRIBUTING EQUIPMENT . . . .	28	16	7.2	70.3	4.7	9.3	40.6	105.9	77.4	183.1	4.4	(NA)	(NA)
362	ELECTRICAL INDUSTRIAL APPARATUS . . . .	52	20	9.2	78.2	6.5	14.5	46.4	121.4	98.8	219.0	4.7	4.8	51.0
3621	MOTORS AND GENERATORS . . . . .	6	4	.3	1.8	.2	.4	1.1	2.7	1.7	4.7	.1	CC	(D)
3622	INDUSTRIAL CONTROLS . . . . .	28	11	5.8	53.1	4.4	10.5	34.0	95.6	73.0	165.1	4.1	3.5	38.5
3629	ELECTRICAL INDUSTRIAL APPARATUS, NEC .	12	5	3.1	22.8	1.9	3.5	11.0	22.1	23.7	47.8	.5	.5	4.9
363	HOUSEHOLD APPLIANCES . . . . .	26	12	1.9	15.8	1.5	2.9	9.5	49.8	25.1	73.8	1.2	2.2	31.5
3634	ELECTRIC HOUSEWARES AND FANS . . . . .	13	8	.9	5.8	.7	1.3	3.8	13.3	11.9	25.2	.5	.5	5.0
364	ELECT. LIGHTING AND WIRING EQUIP . . .	78	44	8.1	63.9	6.0	11.9	40.3	150.1	100.2	249.3	6.6	10.5	153.1
3643	CURRENT-CARRYING WIRING DEVICES . . . .	22	15	2.8	23.2	2.1	4.2	14.1	48.7	27.1	76.4	2.2	5.0	67.8
3645	RESIDENTIAL LIGHTING FIXTURES . . . . .	25	9	.7	4.6	.5	1.0	3.0	9.8	8.9	19.2	.2	(NA)	(NA)
3648	LIGHTING EQUIPMENT, NEC . . . . .	8	5	1.1	7.9	.8	1.6	5.0	18.6	15.5	33.6	.4	(NA)	(NA)
365	RADIO AND TV RECEIVING EQUIPMENT . . .	26	12	2.0	12.7	1.4	2.5	7.1	35.2	49.3	83.2	1.5	2.5	31.4
3651	RADIO AND TV RECEIVING SETS . . . . .	20	12	2.0	12.6	1.4	2.5	7.0	34.9	49.2	82.7	(0)	EE	(D)
366	COMMUNICATION EQUIPMENT . . . . .	104	66	28.8	308.1	16.7	31.4	147.5	528.7	319.5	839.3	38.0	FF	(D)
367	ELECTRONIC COMPONENTS AND ACCESS . .	198	110	17.3	142.9	12.7	24.8	84.4	260.7	116.9	380.1	12.2	33.6	306.7
369	MISC. ELECTRICAL EQUIP., SUPPLIES . . .	87	25	3.5	28.9	2.6	5.2	17.4	63.9	53.6	114.8	1.6	3.7	40.0
3699	ELECTRICAL EQUIPMENT, SUPPLIES, NEC . .	57	7	.6	3.9	.5	.8	2.3	9.2	11.0	20.1	.3	BB	(D)

See footnotes at end of table.

TABLE 3. General Statistics for the State, by Industry Groups and Industries: 1972 and 1967—Continued

(See appendix, Explanation of Terms)

Code	Industry	1972											1967	
		Establishments		All employees		Production workers			Value added by manufacture	Cost of materials <sup>1</sup>	Value of shipments <sup>1</sup>	Capital expenditures, new	All employees	Value added by manufacture
		Total	With 20 employees or more	Number	Payroll	Number	Man-hours	Wages						
		(number)	(number)	(1,000)	(million dollars)	(1,000)	(million)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(1,000)	(million dollars)
37	TRANSPORTATION EQUIPMENT . . . .	178	64	23.1	252.6	15.9	31.9	147.6	468.6	521.9	980.4	14.5	(NA)	(NA)
371	MOTOR VEHICLES AND EQUIPMENT . . . .	60	25	5.4	63.3	4.4	9.3	47.8	188.6	347.3	535.7	(D)	FF	(D)
3713	TRUCK AND BUS BODIES . . . . .	18	9	.6	5.6	.5	1.0	3.7	9.7	11.3	21.0	.2	.4	3.6
373	SHIP, BOAT BUILDING, REPAIRING . .	81	24	7.9	73.4	5.7	11.1	45.1	89.1	31.8	120.6	2.5	FF	(D)
38	INSTRUMENTS AND RELATED PRODUCTS	346	129	33.0	325.2	18.8	35.5	149.6	874.4	419.8	1 277.5	56.5	(NA)	(NA)
382	MEASURING AND CONTROLLING DEVICES.	84	35	12.7	125.5	5.8	11.7	45.4	204.7	91.5	294.4	7.4	(NA)	(NA)
3823	PROCESS CONTROL INSTRUMENTS. . . . .	19	10	5.7	51.7	2.2	4.7	17.0	74.7	35.9	106.8	(D)	(NA)	(NA)
3825	INSTRUMENTS TO MEASURE ELECTRICITY .	28	10	3.4	38.9	1.6	3.3	13.7	67.3	25.5	93.8	1.5	(NA)	(NA)
384	MEDICAL INSTRUMENTS AND SUPPLIES .	77	29	3.5	32.6	2.0	3.8	12.9	61.0	37.1	96.5	3.5	2.8	31.5
3851	OPHTHALMIC GOODS . . . . .	27	10	6.6	45.3	4.7	9.3	34.8	113.9	43.0	164.1	5.3	4.8	72.6
39	MISC. MANUFACTURING INDUSTRIES .	565	186	27.8	208.4	21.2	39.8	127.0	449.4	281.4	721.2	16.4	28.6	337.9
391	JEWELRY, SILVERWARE, PLATED WARE .	112	52	8.2	66.4	5.7	11.4	36.6	119.7	89.0	201.2	2.9	8.7	101.7
3911	JEWELRY, PRECIOUS METAL. . . . .	60	24	4.2	36.6	2.6	5.3	16.6	55.4	41.7	94.6	1.2	4.7	48.9
3914	SILVERWARE AND PLATED WARE . . . . .	29	16	2.9	23.0	2.2	4.4	15.1	53.4	35.0	84.7	1.1	3.2	44.2
3915	JEWELERS' MATERIALS, LAPIDARY WORK .	23	12	1.1	6.8	.9	1.7	4.9	10.9	12.3	22.0	.7	(NA)	(NA)
394	TOYS AND SPORTING GOODS. . . . .	92	38	8.2	58.3	6.5	12.3	38.7	159.2	81.3	237.9	8.4	7.8	90.3
3942	DOLLS. . . . .	8	5	.5	2.0	.4	.6	1.3	3.8	4.5	8.1	.1	CC	(D)
3944	GAMES, TOYS, AND CHILDREN'S VEHICLES	38	20	4.2	30.2	3.3	6.3	18.9	91.8	45.4	136.0	6.1	(NA)	(NA)
3949	SPORTING AND ATHLETIC GOODS, NEC . .	46	13	3.6	26.0	2.8	5.3	18.4	63.1	30.9	92.9	2.3	3.1	30.9
395	PENS, PENCILS, OFFICE, ART GOODS .	40	9	.5	3.9	.4	.8	2.4	6.5	5.4	11.9	.2	.7	6.9
396	COSTUME JEWELRY AND NOTIONS. . . .	56	18	3.3	24.7	2.7	4.4	12.2	48.0	31.6	79.3	.6	3.2	56.4
3961	COSTUME JEWELRY. . . . .	39	15	2.9	21.9	2.4	3.9	10.3	41.6	27.2	68.2	.5	2.9	52.3
3964	NEEDLES, PINS, AND FASTENERS . . . .	9	2	.3	2.5	.2	.4	1.7	6.0	3.8	10.3	.1	.3	4.0
399	MISCELLANEOUS MANUFACTURES . . . .	237	66	7.4	52.8	5.7	10.7	35.5	111.7	71.9	184.2	3.7	7.9	78.5
3991	BROOMS AND BRUSHES . . . . .	24	12	2.3	16.6	1.9	3.5	11.6	39.6	17.7	57.8	1.2	FF	(D)
3993	SIGNS AND ADVERTISING DISPLAYS . . .	95	17	1.4	12.2	1.0	1.9	7.4	20.7	11.3	31.9	.7	1.5	16.0
3999	MANUFACTURING INDUSTRIES, NEC. . . .	107	28	2.9	18.2	2.2	4.1	12.4	38.8	32.5	71.5	1.3	2.7	28.0
--	ADMINISTRATIVE AND AUXILIARY . .	247	146	33.8	442.1	-	-	-	-	-	-	-	28.2	-

Note: The following symbols indicate employment size range for 1967:

AA less than 250 employees      EE 1,000 to 2,499 employees  
BB 250 to 499 employees      FF 2,500 employees and over  
CC 500 to 999 employees

- Represents zero. (NA) Not available. Because of a revision to this industry or industry group in the 1972 edition of the SIC manual, 1967 census data are not available on a comparable basis. (D) Withheld to avoid disclosing figures for individual companies. (Z) Less than half of the unit of measurement shown.

<sup>1</sup>The total cost of materials and value of shipments for industry group shown may include extensive duplication arising from shipments between establishments in the same industry classification. (For a more complete explanation, see appendix.)

<sup>2</sup>Includes figures for industry groups which have been withheld from publication in order to (a) avoid disclosing figures for individual companies or (b) permit further checking of figures for smaller industry groups. Additional detail will appear in the final report for this State.



## Appendix A. SCOPE AND COVERAGE

This report is one of a series presenting preliminary information, by State, from the 1972 Census of Manufactures. The data will be superseded in a final report which, in turn, will be included in *Volume III, Area Statistics, 1972 Census of Manufactures*. The final report will include a comprehensive discussion of the concepts and definitions used in the census.

The census of manufactures covers each manufacturing establishment in the United States with one paid employee or more; manufacturing establishments with no employees are excluded. Firms which operated more than one establishment were required to file a separate report for each location. Companies which engaged in distinctly different lines of activity at one location were asked to submit separate reports if the company records permitted such a separation and the activities were of significant size.

This report includes figures for administrative offices, warehouses, garages, or other auxiliary units which service manufacturing establishments.

In the 1972 census, the approximately 120,000 manufacturing establishments with fewer than 10 employees were excused from filing reports. Under special arrangements which safeguarded the confidentiality of both tax and census records, data on payrolls, sales, and industry classification from the administrative records of the Social Security Administration and the Internal Revenue Service were made available to the Census Bureau for use in the 1972 Economic Censuses (retail and wholesale trade, service industries, construction industries, manufactures, and mineral industries). Estimates for data other than payrolls and sales for these small establishments were constructed from industry averages. The effect on industry aggregates is slight in most industries. For manufacturing as a whole, these small establishments account for less than 3 percent of the payrolls and value added.

Establishments are classified by industry in accordance with industry definitions described in the 1972 edition of the Standard Industrial Classification (SIC) Manual. For 1972, the SIC was significantly revised and the comparability with prior year's data for some industries was significantly affected. The comparability at the 2- and 3-digit SIC levels was less affected. The final volumes of the 1972 Census of Manufactures will contain a table relating aggregates based on the 1972 SIC with aggregates derived from classifying establishments according to the 1967 SIC definitions.

As in earlier censuses, a number of small establishments may have been misclassified as to industry. However, such possible misclassifications have significant effect on *none* of the statistics except the number of establishments. As indicated above, report forms were not mailed to very small establishments (fewer than 10 employees). The industry classifications for these establishments were assigned on the basis of brief descriptions of the general activity of the establishment. Where the description is incomplete or there are relatively fine lines of demarcation among industries or between manufacturing and nonmanufacturing activity, the code assigned to an establishment could differ from that which would have been assigned on the basis of more complete product information. Therefore, the total establishment count for individual industries should be viewed as an approximation rather than a precise measurement. The counts for establishments with 20 employees or more are more reliable than the total number of establishments.

More detailed figures for this State will appear in the final census reports. Final reports will also include a comprehensive discussion of such concepts as "industry" and "establishment," as well as the various statistical items such as "employment," "value of shipments," and "value added." Similar preliminary and final reports will be issued for other States during the coming months. A series of preliminary summary reports showing U.S. totals for each manufacturing industry and for each State are being issued. Final industry reports and final area reports will be published during 1974.

Order forms describing the individual reports and listing their prices may be obtained from any U.S. Department of Commerce district office or from the Publications Distribution Section, Social and Economic Statistics Administration, Washington, D.C. 20233.

The 1972 Census of Manufactures is the 29th census of manufacturing establishments in the United States. For 1972, it was conducted jointly with the censuses of mineral industries, construction industries, retail trade, wholesale trade, and selected services under authority of Title 13 of the United States Code. Title 13 specifies that a census of manufactures be conducted every 5 years and, as amended, to cover years ending in "2" and "7". Title 13 also authorizes an annual sample survey of manufacturing establishments in interim years.



## Appendix B. EXPLANATION OF TERMS

*(For a more complete discussion of these terms and the method of compiling the Census of Manufactures, see the "Introduction" to the 1967 Census of Manufactures, Volume III).*

**All Employees**—All full-time and part-time employees on the payrolls of operating manufacturing establishments for any part of the pay period ending nearest the 12th of the months specified on the report form. Included are all persons on paid sick leave, paid holidays, and paid vacations during these pay periods. Officers of corporations are included as employees; proprietors and partners of unincorporated firms are excluded. The "all employee" number is the average number of production workers for the midmonth payroll period of March, May, August, and November plus the number of nonproduction employees in mid-March.

**Number of Production Workers**—Workers (up through the working foreman level) engaged in fabricating, processing, assembling, inspecting, receiving, packing, warehousing, shipping (but not delivering), and maintenance, repair, janitorial, and watchman services, product development, auxiliary production for plant's own use (e.g., powerplant), recordkeeping, and other closely associated services. Proprietors and partners are excluded.

**Payroll**—This item includes all forms of compensation such as salaries, wages, commissions, dismissal pay, bonuses, vacation and sick leave pay, and compensation in kind, prior to such deductions as employees' Social Security contributions, withholding taxes, group insurance, union dues, and savings bonds. The total includes salaries of officers of these establishments, if a corporation; it excludes payments to the proprietor or partners, if an unincorporated concern. Respondents were told that in reporting they could follow the definition of payrolls used for calculating the Federal withholding tax.

**Man-Hours of Production Workers**—This total relates to production-worker man-hours worked or paid for at the plant including actual overtime hours (not straight-time equivalent hours). It excludes hours paid for vacation, holidays, or sick leave when the employee was not at the plant.

**Cost of Materials**—The term "Cost of Materials" refers to charges actually paid or payable for items consumed or put into production during the year, including freight and other direct charges incurred by the establishment in acquiring these materials. It includes the cost of materials or fuel consumed regardless of

whether these items were purchased by the establishment from other companies, transferred to it from other establishments of the same company, or withdrawn from inventory during the year. The establishment was requested to value materials transferred from other parts of the company at its approximate market value, not at cost of production. The important components of this cost item are (a) all raw materials, semifinished goods, parts, components, containers, scrap, and supplies put into production or used as operating supplies and for repair and maintenance during the year; (b) electric energy purchased; (c) fuels consumed for heat, power, or the generation of electricity; (d) work done by others on materials or parts furnished by manufacturing establishments (contract work); and (e) products bought and resold in the same condition.

**Value of Shipments**—The value of shipments is the received or receivable net selling value, f.o.b. plant (exclusive of freight and taxes), of all products shipped, both primary and secondary, as well as all miscellaneous receipts such as receipts for contract work performed for others, installation and repair, sales of scrap, and sale of products bought and resold without further processing. Included are all items made by the establishment or for it under contract from materials owned by it whether sold, transferred to other plants of the same company, or shipped on consignment. The net selling value of products made in one plant on a contract basis from materials owned by another was reported by the plant providing the materials.

In the case of multiunit companies, the manufacturer was requested to report the value of products transferred to other establishments of the same company at full economic value; i.e., to include not only the direct costs of production but also a reasonable proportion of "all other costs" (including company overhead) and profit.

**Duplication in Cost of Materials and Value of Products**—The aggregate cost of materials and value-of-shipments figures for industry groups and for all manufacturing industries may include large amounts of duplication since the products of some industries are used as materials by others. With some important exceptions, such as motor vehicles and parts, this duplication is not significant within individual industries but arises from the addition of the totals of related industries in successive stages of the production of a finished manufactured product. Examples are the addition of flour mills to bakeries in the food group and the addition of pulp mills to paper mills in the paper and allied products group of industries. Esti-



mates of this duplication indicate that the value of manufactured products exclusive of such duplication—the value of finished manufactures—approximates two-thirds of the total value of products.

Prior to 1962, the Bureau of the Census did not publish figures for cost of materials or value of shipments if they contained significant duplication. Effective with the 1962 annual survey these figures were shown at all industry levels for the United States to meet the requests for their use in studies in which the presence of an indeterminate amount of duplication is not a limiting factor. However, they are appropriately footnoted. Effective with the 1964 annual survey, these industry group totals are also shown at the State, standard metropolitan statistical area, and large-county level.

Even where there is no significant amount of duplication, value-of-shipments figures are deficient as measures of the relative economic importance of individual manufacturing industries or geographic areas because of the wide variation in ratio of materials, labor, and other processing costs to value of shipments among industries.

**Value Added by Manufacture**—This measure of manufacturing activity is derived by subtracting the cost of materials, supplies, containers, fuel, purchased electricity, and cost of resales contract work from the value of shipments for products manufactured plus resales and receipts for services rendered. The result of this calculation is adjusted by the net change in finished goods and work-in-process inventories between the beginning and end of the year. (In the few industries that report value of production rather than value of shipments, only changes in work-in-process inventories are used to adjust value added. In the shipbuilding and repairing industry, no inventory adjustment is made.)

“Value added” avoids the duplication in the value of shipments figure which results from the use of products of some establishments as materials by others. Value added is considered to be the best value measure available for comparing the relative economic importance of manufacturing among industries and geographic areas.

**Expenditures for Plant and Equipment**—Manufacturing establishments in operation and establishments under construction but not yet in operation, were asked to report their expenditures for (a) permanent additions and major alterations to the manufacturing establishment, and (b) new machinery and equipment used for replacement purposes and additions to plant capacity if they are of the type for which depreciation accounts are ordinarily maintained.

These totals exclude expenditures for new facilities and equipment leased from nonmanufacturing concerns; new facilities owned by the Federal Government but operated under contract by private companies; and plant and equipment furnished to the manufacturer by communities and nonprofit organizations. Expenditures for used plant and equipment (although reported in the census), expenditures for land, and cost of maintenance and repairs charged as current operating expense are also omitted from the figures for new capital expenditures.

**Central Administrative Offices and Auxiliary Units**—In the 1972 census as in previous years, respondents were asked to file separate reports for central administrative offices or auxiliary units which were (1) at different locations from the establishments served or, (2) at the same location as one of these establishments but were not operated as an integral part thereof and served two or more establishments. The functions of employees in central administrative offices include general company policy determination, planning and management (that is, company purchasing, accounting, general engineering, direction of company personnel matters, and legal and patent matters). Auxiliaries are storage facilities, garages, repair shops, purchasing offices, sales promotion offices, and research laboratories serving the plants or central management of the company.

**Standard Metropolitan Statistical Areas**—Standard metropolitan statistical areas (SMSA) are integrated economic and social units with a large volume of daily travel and communication between the central city and outlying parts of the area.<sup>1</sup> Each area (except in New England) consists of one whole county or more. An area may contain not only highly industrialized counties but also adjoining counties which, though primarily residential in character, contribute significantly to the industrial counties' labor force and are socially and economically integrated with the central city. These areas are defined by the Federal Committee on Standard Metropolitan Statistical Areas of the Office of Management and Budget for general-purpose use throughout the Federal Government in presenting economic and social data. In the New England States, similar intergration criteria are applied in defining

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<sup>1</sup> Each standard metropolitan statistical area must include either (1) a city with 50,000 or more inhabitants, or (2) a city having a population of at least 25,000 which (a) with the addition of the population of contiguous places has a population density of at least 1,000 persons per square mile; (b) constitutes, for general economic and social purposes, a single community with a combined population of at least 50,000; and (c) includes a total population of at least 75,000 in the county or counties in which the city and contiguous places are located.

SMSA's on a city and town basis because towns rather than counties are regarded as the significant unit in this region of the country.

The requirement that each SMSA consist of county units (except in New England) sometimes results in the inclusion in an area of considerable amount of territory which would not ordinarily be considered "metropolitan," much less "industrial." It is recognized that metropolitan areas could be more accurately defined in terms of smaller area segments such as minor civil

divisions, but the usefulness of areas so defined would be limited by the fact that many types of economic and social data are available only on a county basis.

Each SMSA is designated by the name of the principal city of the area. In addition to the name of the principal city, the area title may include one or two additional city names.

The data for SMSA's which changed definition since the 1967 census have not been retabulated on the new basis for years prior to 1972.



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## PRELIMINARY REPORT

**1972 CENSUS OF  
MANUFACTURES**

## AREA SERIES

72(P)-S23

U. S. DEPARTMENT OF COMMERCE • Social and Economic Statistics Administration • BUREAU OF THE CENSUS

ed April 1974

**Michigan**

Value added by manufacturing in 1972 in the State of Michigan amounted to \$23,338 million, a 15-percent increase from 1971 and a 35-percent increase from 1967.

This report presents preliminary results from the 1972 Census of Manufactures for the State, its Standard Metropolitan Statistical Areas, and its counties.

Data are provided for industry groups within the State. Historical data, back to 1958, are included for the State as a whole,

and 1967 figures on employment and value added are provided for the smaller areas.

The figures in this report have been subjected to only preliminary review and must be regarded as approximations of the final census figures. No adjustments have been made in the value figures for changes in price level.

For an explanation of the terms used in the tables, see the appendix at the end of this report.

**TABLE 1. General Statistics for the State: 1972 and Earlier Years**

(See appendix, Explanation of Terms)

Year	Establishments		All employees <sup>1</sup>		Production workers			Value added by manufacture	Cost of materials <sup>2</sup>	Value of shipments <sup>2</sup>	Capital expenditures, new
	Total	With 20 employees or more	Number	Payroll	Number	Man-hours	Wages				
	(number)	(number)	(1,000)	(million dollars)	(1,000)	(millions)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(million dollars)
MICHIGAN											
1972 Census .....	14,373	4,988	1,084.5	12,850.0	767.5	1,584.3	8,088.4	23,337.8	30,833.2	54,019.0	1,299.5
1971 ASM .....	(NA)	(NA)	1,034.4	11,128.6	728.6	1,463.5	6,965.4	20,270.6	26,787.3	47,206.9	1,202.3
1970 ASM .....	(NA)	(NA)	1,043.6	10,232.5	726.0	1,468.1	6,332.4	17,959.4	22,339.2	40,202.4	1,300.7
1969 ASM .....	(NA)	(NA)	1,169.0	11,041.6	846.9	1,743.1	7,154.9	20,253.0	25,804.9	45,963.8	1,371.6
1968 ASM .....	(NA)	(NA)	1,139.6	10,350.4	830.5	1,744.3	6,777.4	19,266.4	24,798.6	43,982.8	1,203.2
1967 Census .....	14,340	5,157	1,134.1	9,357.2	816.7	1,669.2	6,008.0	17,241.6	22,011.1	39,133.2	1,360.2
1966 ASM .....	(NA)	(NA)	1,145.8	9,221.3	836.0	1,775.7	6,066.7	17,629.2	23,277.4	40,557.9	1,489.2
1965 ASM .....	(NA)	(NA)	1,092.8	8,586.1	797.9	1,721.7	5,698.9	16,885.6	22,273.0	38,911.4	1,452.9
1964 ASM .....	(NA)	(NA)	1,013.3	7,604.9	728.9	1,564.6	4,948.8	14,358.6	19,081.1	33,200.3	1,030.6
1963 Census .....	14,220	4,537	961.1	6,950.7	690.8	1,473.9	4,521.0	13,090.3	(NA)	(NA)	761.8
1962 ASM .....	(NA)	(NA)	936.6	6,281.0	674.3	1,400.9	4,124.6	11,969.3	(NA)	(NA)	555.8
1961 ASM .....	(NA)	(NA)	888.7	5,678.2	626.1	1,256.4	3,597.8	10,191.7	(NA)	(NA)	563.1
1960 ASM .....	(NA)	(NA)	963.5	6,106.8	690.4	1,412.5	3,977.4	10,858.2	(NA)	(NA)	655.9
1959 ASM .....	(NA)	(NA)	933.4	5,855.1	664.1	1,388.1	3,769.7	10,534.8	(NA)	(NA)	534.1
1958 Census .....	13,596	3,990	880.0	5,161.2	608.9	1,204.1	3,184.8	8,363.6	(NA)	(NA)	465.3

Note: "ASM" data are based on a representative sample of manufacturing establishments canvassed in the Annual Survey of Manufactures. These estimates may differ from the results of a complete canvass of all manufacturing establishments. The standard errors associated with these estimates are published in the annual survey of manufactures volumes for this period. For comparative purposes, the 1972 ASM estimate for the State of Michigan was 1,069 thousand employees, and \$23,264 million in value added with corresponding standard error of estimate of 1 and 1.

(NA) Not available.

<sup>1</sup>Includes employment and payroll at central administrative offices and auxiliary units. (For a definition of these units, see appendix.)

<sup>2</sup>The total cost of materials and value of shipments may include extensive duplication arising from shipments between establishments in the same industry classification. (For a more complete explanation, see appendix.)

TABLE 2. General Statistics for the State, Standard Metropolitan Statistical Areas, and Counties: 1972 and 1967

(See appendix, Explanation of Terms)

State, standard metropolitan statistical areas, and counties <sup>1</sup>	1972											1967	
	Establishments		All employees <sup>2</sup>		Production workers			Value added by manufacture	Cost of materials <sup>3</sup>	Value of shipments <sup>3</sup>	Capital expenditures, new	All employees	Value added by manufacture
	Total (number)	With 20 employees or more (number)	Number (1,000)	Payroll (million dollars)	Number (1,000)	Man-hours (million)	Wages (million dollars)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(1,000)	(million dollars)
MICHIGAN, TOTAL . . . . .	14 373	4 988	1 084.5	12 850.0	767.5	1 584.3	8 083.4	23 337.8	30 833.2	54 019.0	1 299.5	1 134.1	17 241.6
STANDARD METROPOLITAN STATISTICAL AREAS <sup>4</sup>													
ANN ARBOR . . . . .	297	97	35.2	446.9	26.6	56.9	314.1	900.5	1 227.5	2 127.7	27.2	35.0	568.0
BATTLE CREEK . . . . .	243	93	24.3	260.6	17.9	36.9	179.1	680.4	492.3	1 161.6	25.1	25.5	521.2
BAY CITY . . . . .	149	50	9.9	100.8	7.7	15.3	74.2	197.5	221.1	417.8	11.7	12.3	189.7
DETROIT . . . . .	7 452	2 558	561.4	7 262.6	369.8	774.6	4 186.8	11 754.2	17 245.0	28 925.1	610.5	599.8	8 725.9
GRAND RAPIDS . . . . .	1 195	467	75.3	715.7	57.1	115.1	486.4	1 504.7	1 262.9	2 738.8	69.4	75.7	1 091.4
JACKSON . . . . .	298	114	17.7	176.3	13.4	26.8	120.9	381.6	348.0	717.7	23.6	19.4	277.9
KALAMAZOO-PORTAGE . . . . .	419	178	31.9	333.3	22.2	45.5	204.5	740.5	624.4	1 354.8	31.0	35.7	580.2
LANSING-EAST LANSING . . . . .	431	146	41.6	498.7	32.8	69.5	374.8	979.4	2 144.0	3 192.3	64.7	40.4	791.7
MUSKEGON-MUSKEGON HEIGHTS . . . . .	264	101	22.5	223.8	16.6	32.6	152.5	394.8	330.3	720.8	22.2	29.1	339.9
SAGINAW . . . . .	228	88	33.9	425.6	26.9	56.1	322.5	911.8	747.3	1 665.6	67.7	32.0	560.0
TOLEDO . . . . .	1 176	446	92.5	971.7	64.4	129.7	625.5	1 949.8	2 263.4	4 186.8	139.7	77.7	1 200.8
PORTION IN OHIO . . . . .	1 058	403	84.2	869.9	58.2	116.0	557.2	1 760.0	2 074.2	3 312.9	118.2	70.6	1 079.8
PORTION IN MICHIGAN . . . . .	118	43	8.3	101.8	6.2	13.7	68.3	189.8	189.2	373.9	21.5	7.1	121.0
COUNTIES													
ALLEGAN . . . . .	135	54	7.9	69.6	6.1	12.4	46.8	163.7	191.3	350.5	10.7	5.6	67.3
ALPENA . . . . .	46	10	2.9	30.6	2.2	4.7	21.4	86.5	44.1	129.5	12.4	3.2	62.2
ANTRIM . . . . .	31	8	1.2	9.3	1.1	2.1	7.1	19.4	15.8	35.3	1.6	6.9	11.9
ARENAC . . . . .	17	7	.8	5.1	.7	1.3	3.7	10.2	9.0	18.7	.3	.5	4.1
BARAGA . . . . .	40	7	.7	5.7	.5	1.2	4.2	11.9	23.9	35.5	.5	.7	7.8
BARRY . . . . .	42	12	2.7	25.2	1.9	4.2	15.9	48.2	38.6	93.9	3.6	3.1	47.8
BAY . . . . .	149	50	9.9	100.8	7.7	15.3	74.2	197.5	221.1	417.8	11.7	12.3	189.7
BENZIE . . . . .	21	10	.7	4.1	.6	1.0	2.8	7.4	12.9	20.2	.3	.7	6.8
BERRIEN . . . . .	351	128	29.0	290.7	20.6	41.6	182.6	553.9	510.9	1 065.6	26.0	29.3	363.9
BRANCH . . . . .	73	30	3.3	25.7	2.7	5.4	19.4	55.6	60.0	112.9	3.5	3.8	38.4
CALHOUN . . . . .	201	81	21.6	235.4	16.0	32.7	163.2	632.2	453.7	1 077.7	21.5	22.4	473.4
CASS . . . . .	89	34	3.7	28.8	3.0	5.4	19.7	59.7	78.3	136.5	3.3	3.7	38.0
CHARLEVOIX . . . . .	42	15	2.0	15.2	1.6	3.3	11.1	45.4	27.0	71.2	1.9	2.0	23.3
CHEBOYGAN . . . . .	37	9	1.1	9.5	.9	1.9	7.1	22.1	45.5	68.3	1.2	.8	9.6
CLARE . . . . .	33	6	.4	3.3	.3	.6	2.1	6.3	11.4	17.2	.4	1.0	11.2
CLINTON . . . . .	39	12	1.7	15.7	1.3	2.7	11.4	35.1	45.7	81.0	2.6	1.4	23.3
DELTA . . . . .	71	18	3.0	27.2	2.2	4.3	18.7	46.3	93.8	128.7	(0)	2.8	37.4
DICKINSON . . . . .	57	16	1.7	13.6	1.4	2.6	9.0	22.1	17.9	40.5	2.4	1.4	17.1
EATON . . . . .	86	24	3.1	29.4	2.4	4.9	20.4	59.9	50.5	109.1	3.4	2.9	34.5
EMMET . . . . .	29	9	.9	7.0	.8	1.5	5.2	13.5	9.5	22.9	.8	.8	9.4
GLADWIN . . . . .	25	8	.6	5.8	.5	.8	3.1	9.1	12.3	20.8	2.6	.4	4.5
GOGEIC . . . . .	48	9	1.0	6.5	.8	1.6	5.4	12.4	14.6	26.5	.6	.9	7.3
GRAND TRAVERSE . . . . .	71	26	3.1	21.9	2.5	4.5	14.8	48.4	42.0	90.0	3.1	2.8	31.8
GRATIOT . . . . .	47	21	3.3	29.9	2.5	5.3	19.6	77.4	117.3	198.4	(0)	3.5	53.5
HILLSDALE . . . . .	79	33	3.8	31.9	3.0	5.9	21.9	79.5	110.4	180.0	2.8	2.9	39.6
HOUGHTON . . . . .	55	9	.7	4.4	.5	1.0	3.1	9.3	8.6	17.7	.5	.8	8.9
HURON . . . . .	58	19	1.8	15.2	1.5	3.1	11.5	32.8	31.5	65.2	1.4	2.0	24.0
INGHAM . . . . .	237	82	32.6	414.9	25.6	54.8	313.6	805.9	1 943.4	2 807.6	55.2	32.0	675.2
IONIA . . . . .	69	28	4.2	38.7	3.5	7.1	29.4	78.5	104.4	194.6	3.5	4.1	58.7
IOSCO . . . . .	36	10	.8	5.9	.7	1.5	4.9	12.8	11.8	24.2	.8	.6	6.7
ISABELLA . . . . .	30	8	.8	6.7	.6	1.3	4.9	15.9	15.0	32.2	.5	.6	7.5
JACKSON . . . . .	298	114	17.7	176.3	13.4	26.8	120.9	381.6	348.0	717.7	23.6	19.4	277.9
KALAMAZOO . . . . .	309	128	27.0	296.6	18.2	37.7	178.1	663.1	539.9	1 191.0	28.2	30.2	510.2
KENT . . . . .	876	340	58.9	573.3	44.8	90.1	394.4	1 200.4	970.9	2 152.7	56.6	59.8	864.2
LAPEER . . . . .	61	24	2.5	22.0	2.0	3.9	15.4	42.6	56.5	97.7	5.1	2.3	26.5
LENAWEE . . . . .	158	67	12.2	122.5	9.4	18.4	85.4	251.7	321.7	576.3	14.9	13.5	199.6
LIVINGSTON . . . . .	112	46	3.5	32.5	2.7	5.4	21.4	62.7	65.8	126.9	4.4	2.9	36.2
MACOMB . . . . .	1 460	472	95.7	1 274.1	60.2	129.1	683.7	1 737.2	2 220.0	3 909.8	60.1	94.1	1 131.9
MANISTEE . . . . .	40	18	2.5	20.9	2.0	3.9	14.7	42.9	38.3	82.5	6.8	2.7	41.9
MARQUETTE . . . . .	60	13	1.1	7.1	.8	1.4	4.7	15.7	16.5	32.3	2.6	1.6	15.5
MASON . . . . .	52	25	2.1	17.7	1.7	3.4	12.3	44.5	37.2	82.5	3.3	2.4	31.9
MECOSTA . . . . .	26	10	1.6	9.6	1.3	2.4	7.2	14.7	17.2	31.8	.4	1.7	20.8
MENOMINEE . . . . .	83	31	2.4	16.3	2.0	3.9	12.2	30.0	44.6	75.0	1.7	2.5	26.2
MONROE . . . . .	118	43	8.3	101.8	6.2	13.7	63.5	189.8	189.2	373.9	21.5	7.1	121.0
MONTCALM . . . . .	59	17	4.2	35.3	3.4	6.6	25.6	79.1	92.4	170.6	3.7	5.4	69.3
MONTMORENCY . . . . .	28	4	.8	4.1	.7	1.4	3.6	10.8	10.1	19.1	.5	.4	5.0
MUSKEGON . . . . .	232	90	21.8	220.1	16.0	31.5	149.7	385.5	319.3	700.6	21.6	28.5	334.9
NEWAYGO . . . . .	32	7	1.8	19.4	.9	1.8	6.2	39.2	53.4	92.9	(0)	1.6	35.1
OAKLAND . . . . .	1 809	608	91.5	1 107.7	63.4	131.0	685.8	2 075.6	3 146.7	5 226.0	124.4	94.1	1 457.4
OCEANA . . . . .	32	11	.7	3.7	.6	1.1	2.8	9.3	11.0	20.2	.6	.6	5.0
OGEMAW . . . . .	32	8	.6	3.9	.5	1.0	2.9	19.6	18.7	37.9	2.5	.3	7.1
OSCEOLA . . . . .	33	9	1.9	13.6	1.6	3.0	10.1	30.6	27.1	57.0	.8	1.9	19.4
OTSEGO . . . . .	28	6	.9	7.5	.7	1.4	5.8	19.3	12.3	31.3	1.1	.8	9.5
OTTAWA . . . . .	319	127	16.4	142.4	12.3	25.0	92.0	304.3	292.0	586.1	12.8	15.9	237.2
ROSCOMMON . . . . .	20	3	.4	2.6	.3	.6	2.2	7.1	6.7	13.6	1.2	.2	1.4
SAGINAW . . . . .	228	88	33.9	425.6	26.9	56.1	322.5	911.8	747.3	1 665.6	67.7	32.0	560.0
ST. CLAIR . . . . .	209	74	10.1	90.1	7.5	14.6	60.9	171.0	246.7	428.4	10.0	10.2	165.1
ST. JOSEPH . . . . .	150	74	8.8	76.3	6.8	13.2	53.3	198.6	279.9	475.8	11.9	9.3	126.8
SANILAC . . . . .	78	26	3.6	27.1	2.9	6.5	19.2	50.4	62.4	112.2	4.4	3.5	40.1
SHIAWASSEE . . . . .	83	35	5.4	45.8	3.7	7.3	28.3	72.6	80.3	151.6	5.7	6.0	58.7
TUSCOLA . . . . .	63	22	2.8	21.2	2.3	4.7	15.8	46.6	39.4	84.9	2.5	2.5	31.4
VAN BUREN . . . . .	110	50	4.9	36.7	4.0	7.8	26.4	77.4	84.5	163.8	2.8	5.5	70.0
WASHTENAW . . . . .	297	97	35.2	446.9	26.6	56.9	314.1	900.5	1 227.5	2 127.7	27.2	35.0	568.0
WAYNE . . . . .	3 301	1 334	338.1	4 736.2	234.0	490.6	2 719.6	7 665.1	11 509.3	19 136.3	406.5	396.2	5 908.8
WEXFORD . . . . .	60	26	2.9	22.4	2.3	4.5	15.0	48.9	43.0	90.5	2.5	2.1	24.7

(NA) Not available (D) Withheld to avoid disclosing figures for individual companies.

<sup>1</sup>Some counties were withheld from publication in order to (a) avoid disclosing figures for individual companies or (b) permit further checking of the figures for smaller counties. Additional detail will appear in the final report for this State.<sup>2</sup>Includes employment and payroll at central administrative offices and auxiliary units. (For a definition of these units, see appendix.)<sup>3</sup>The total cost of materials and value of shipments may include extensive duplication arising from shipments between establishments in the same industry classification. (For a more complete explanation, see appendix.)<sup>4</sup>The standard metropolitan statistical areas in this State are defined as follows:

ANN ARBOR SMSA: Coextensive with Washtenaw County, MI.

BATTLE CREEK SMSA: Consists of Barry and Calhoun Counties, MI.

BAY CITY SMSA: Coextensive with Bay County, MI.

DETROIT SMSA: Consists of Lapeer, Livingston, Macomb, Oakland, St. Clair, and Wayne Counties, MI.

GRAND RAPIDS SMSA: Consists of Kent and Ottawa Counties, MI.

JACKSON SMSA: Coextensive with Jackson County, MI.

KALAMAZOO-PORTAGE SMSA: Consists of Kalamazoo and Van Buren Counties, MI.

LANSING-EAST LANSING SMSA: Consists of Clinton, Eaton, Ingham, and Ionia Counties, MI.

MUSKEGON-MUSKEGON HEIGHTS SMSA: Consists of Muskegon and Oceana Counties, MI.

SAGINAW SMSA: Coextensive with Saginaw County, MI.

TOLEDO, OH-MI, SMSA: Consists of Fulton, Lucas, Ottawa, and Wood Counties, OH, and Monroe County, MI.



TABLE 3. General Statistics for the State, by Industry Groups and Industries: 1972 and 1967

(See appendix, Explanation of Terms)

Code	Industry	1972												1967	
		Establishments		All employees		Production workers			Value added by manufacture	Cost of materials <sup>1</sup>	Value of shipments <sup>1</sup>	Capital expenditures, new	All employees	Value added by manufacture	
		Total	With 20 employees or more	Number	Payroll	Number	Man-hours	Wages							
		(number)	(number)	(1,000)	(million dollars)	(1,000)	(million)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(1,000)	(million dollars)		
	ALL INDUSTRIES, TOTAL <sup>2</sup> . . . . .	14 373	4 988	1 084.5	12 850.0	767.5	1 584.3	8 088.4	23 337.8	30 833.2	54 019.0	1 299.5	1 134.1	17 241.6	
20	FOOD AND KINDRED PRODUCTS. . . . .	892	387	48.3	447.3	33.4	65.9	276.7	1 308.2	2 303.0	3 609.5	70.3	51.6	926.0	
201	MEAT PRODUCTS. . . . .	191	75	7.0	67.2	5.5	11.6	47.3	134.0	829.6	959.2	10.3	6.1	82.2	
2011	MEATPACKING PLANTS . . . . .	117	36	3.5	32.8	2.7	5.8	24.1	58.9	599.1	656.6	5.4	2.7	32.5	
2013	SAUSAGES AND OTHER PREPARED MEATS. . . . .	66	36	3.1	32.1	2.4	5.1	21.5	68.2	216.1	281.2	4.3	3.2	48.0	
202	DAIRY PRODUCTS . . . . .	153	73	6.4	58.6	3.3	6.6	29.2	159.1	439.5	599.8	10.4	8.2	144.5	
2022	CHEESE, NATURAL AND PROCESSED. . . . .	15	5	.3	1.8	.2	.5	1.4	5.0	17.6	22.6	.3	.3	2.6	
2023	CONDENSED AND EVAPORATED MILK . . . . .	11	3	1.0	9.0	.8	1.6	6.9	41.1	56.1	98.0	2.2	1.0	28.6	
2024	ICE CREAM AND FROZEN DESSERTS. . . . .	28	13	.7	5.5	.3	.6	2.2	13.2	27.1	40.1	.5	.9	13.9	
2026	FLUID MILK . . . . .	89	42	4.3	40.2	1.8	3.6	16.9	93.7	301.1	394.3	6.8	5.8	96.4	
203	PRESERVED FRUITS AND VEGETABLES. . . . .	124	64	8.2	49.7	7.0	13.0	36.5	179.2	244.3	426.7	12.2	(NA)	(NA)	
2033	CANNED FRUITS AND VEGETABLES . . . . .	52	33	3.1	17.8	2.6	4.7	12.4	59.9	92.1	155.1	2.5	2.7	34.5	
2035	PICKLES, SAUCES, AND SALAD DRESSINGS . . . . .	34	12	2.2	12.8	1.9	3.7	10.4	48.7	45.6	94.6	1.8	2.6	38.1	
2038	FROZEN SPECIALTIES . . . . .	16	6	.8	5.6	.7	1.3	3.9	14.0	26.5	40.5	2.0	(NA)	(NA)	
204	GRAIN MILL PRODUCTS. . . . .	54	14	6.7	79.0	5.5	10.9	61.0	340.0	240.1	578.4	8.9	7.5	249.8	
205	BAKERY PRODUCTS. . . . .	147	50	8.7	79.4	5.5	10.7	45.5	168.3	129.0	297.6	5.8	10.3	125.7	
2051	BREAD, CAKE, AND RELATED PRODUCTS. . . . .	137	49	7.3	70.2	4.5	8.8	38.6	147.9	104.2	252.1	5.0	8.7	103.2	
2052	COOKIES AND CRACKERS . . . . .	10	7	1.4	9.2	1.1	1.8	6.9	20.4	24.9	45.5	.8	1.6	22.5	
206	SUGAR AND CONFECTIONERY PRODUCTS . . . . .	25	11	1.5	12.8	1.2	2.7	9.7	36.6	40.3	78.1	2.2	(NA)	(NA)	
2065	CONFECTIONERY PRODUCTS . . . . .	19	5	.5	4.2	.3	.6	2.5	6.9	8.9	15.7	.3	CC	(D)	
207	FATS AND OILS. . . . .	15	8	.6	6.9	.4	1.0	4.6	17.3	31.8	49.2	.7	(NA)	(NA)	
208	BEVERAGES. . . . .	100	53	6.9	75.9	3.5	6.9	33.1	228.5	274.8	502.8	18.0	7.3	135.6	
2086	BOTTLED AND CANNED SOFT DRINKS . . . . .	71	41	4.3	42.3	1.7	3.4	13.3	103.9	154.9	258.4	8.4	4.7	71.0	
209	MISC. FOODS AND KINDRED PRODUCTS . . . . .	83	28	2.2	17.8	1.5	2.6	9.7	45.1	73.6	117.8	1.8	(NA)	(NA)	
2095	FOOD PREPARATIONS, NEC . . . . .	56	23	1.9	14.7	1.3	2.2	8.2	37.1	54.6	91.1	(D)	1.6	18.8	
22	TEXTILE MILL PRODUCTS. . . . .	43	18	3.8	34.8	3.1	6.9	25.2	71.8	82.9	154.0	2.9	3.1	37.8	
229	MISCELLANEOUS TEXTILE GOODS. . . . .	22	10	2.2	25.2	1.8	4.0	17.8	51.2	54.8	105.7	1.9	2.3	31.4	
23	APPAREL, OTHER TEXTILE PRODUCTS. . . . .	241	75	20.5	205.9	17.4	34.4	161.0	411.3	458.0	860.9	6.9	21.0	254.9	
232	MEN'S AND BOYS' FURNISHINGS. . . . .	14	6	.7	3.3	.6	1.0	2.4	5.5	13.7	18.9	.1	.5	5.2	
233	WOMEN'S, AND MISSES' OUTERWEAR . . . . .	30	9	.6	3.5	.6	1.0	2.5	6.1	4.7	10.7	(Z)	.9	6.2	
234	WOMEN'S, CHILDREN'S UNDERGARMENTS. . . . .	12	3	1.4	7.9	1.1	1.7	4.6	12.8	11.7	25.1	.2	1.3	9.4	
2341	WOMEN'S AND CHILDREN'S UNDERWEAR . . . . .	6	4	1.0	5.8	.7	1.0	2.7	9.0	10.4	19.9	.2	CC	(D)	
2342	BRASSIERES AND ALLIED GARMENTS . . . . .	4	4	.4	2.1	.4	.7	1.9	3.8	1.3	5.1	(Z)	BB	(D)	
238	MISC. APPAREL AND ACCESSORIES. . . . .	15	7	1.4	6.9	1.3	2.4	5.7	13.0	11.0	23.3	.2	.8	8.2	
2381	FABRIC DRESS AND WORK GLOVES . . . . .	8	3	.8	3.0	.7	1.4	2.5	5.1	3.5	8.1	.1	.2	1.5	
239	MISC. FABRICATED TEXTILE PRODUCTS. . . . .	155	40	16.0	182.5	13.6	27.7	144.4	370.5	414.1	777.0	6.3	16.6	218.3	
2391	CURTAINS AND DRAPERIES . . . . .	42	7	.4	2.0	.3	.6	1.4	2.9	2.9	5.8	(D)	.3	2.1	
2394	CANVAS AND RELATED PRODUCTS. . . . .	38	10	.6	3.2	.5	.9	2.2	5.4	6.6	11.9	.1	.6	4.5	
2399	FABRICATED TEXTILE PRODUCTS, NEC . . . . .	22	0	.7	5.4	.6	1.2	4.2	15.8	20.2	35.6	.7	1.7	20.6	
24	LUMBER AND WOOD PRODUCTS . . . . .	1 075	172	14.8	107.1	12.4	23.9	79.2	210.5	260.7	467.5	16.2	(NA)	(NA)	
2411	LOGGING CAMPS, LOGGING CONTRACTORS . . . . .	377	3	1.2	5.7	1.1	1.9	5.0	12.8	12.5	25.3	1.6	1.5	11.2	
242	SAWMILLS AND PLANING MILLS . . . . .	235	40	2.8	18.2	2.5	4.8	14.9	34.4	37.6	72.4	4.4	3.0	26.4	
2421	SAWMILLS AND PLANING MILLS, GENERAL. . . . .	199	25	2.0	13.1	1.8	3.5	11.1	25.9	29.7	56.0	4.0	2.5	22.4	
243	MILLWORK, PLYWOOD, STRUC. MEMBERS. . . . .	160	40	3.0	23.8	2.4	4.5	16.2	43.4	59.8	101.9	2.6	(NA)	(NA)	
2431	MILLWORK . . . . .	74	15	1.2	9.6	1.0	1.7	6.4	17.8	27.9	45.3	1.3	(NA)	(NA)	
2434	WOOD KITCHEN CABINETS. . . . .	42	7	.5	3.8	.4	.7	2.6	6.1	4.7	10.7	.2	(NA)	(NA)	
2435	HARDWOOD VENEER AND PLYWOOD. . . . .	7	3	.4	2.3	.3	.6	1.8	4.3	4.8	9.0	.1	(NA)	(NA)	
2439	STRUCTURAL WOOD MEMBERS, NEC . . . . .	37	12	.9	8.2	.7	1.5	5.4	15.2	22.4	36.9	1.0	(NA)	(NA)	
244	WOOD CONTAINERS. . . . .	72	24	1.5	8.7	1.3	2.5	6.7	17.3	19.2	35.8	.6	(NA)	(NA)	
2449	WOOD PALLETS AND SKIDS . . . . .	46	24	1.3	7.2	1.1	2.1	5.6	13.6	15.1	28.0	.6	(NA)	(NA)	
245	WOOD BUILDINGS AND MOBILE HOMES. . . . .	33	25	2.8	24.9	2.2	4.4	17.9	43.0	79.3	121.2	1.6	(NA)	(NA)	
2451	MOBILE HOMES . . . . .	21	14	2.1	19.7	1.7	3.5	14.6	34.5	66.5	100.3	(D)	(NA)	(NA)	
2452	PREFABRICATED WOOD BUILDINGS . . . . .	12	10	.7	5.1	.5	.9	3.3	8.5	12.7	20.9	(D)	(NA)	(NA)	
249	MISCELLANEOUS WOOD PRODUCTS. . . . .	198	35	3.6	25.7	2.9	5.7	18.5	59.6	52.3	110.8	5.4	(NA)	(NA)	
2499	WOOD PRODUCTS, NEC . . . . .	195	34	3.5	25.5	2.9	5.6	18.3	59.3	51.8	110.1	5.4	(NA)	(NA)	
25	FURNITURE AND FIXTURES . . . . .	286	130	19.7	178.0	14.9	29.6	122.0	356.3	240.0	590.3	13.4	21.5	275.0	
251	HOUSEHOLD FURNITURE. . . . .	131	66	6.3	47.1	5.1	10.1	33.5	84.1	60.8	144.4	2.4	(NA)	(NA)	
2511	WOOD HOUSEHOLD FURNITURE . . . . .	63	32	3.5	26.0	2.9	5.8	18.5	44.9	29.8	74.5	1.2	(NA)	(NA)	
2512	UPHOLSTERED HOUSEHOLD FURNITURE. . . . .	25	17	1.8	13.9	1.4	2.7	10.1	22.5	13.8	36.1	.7	(NA)	(NA)	
2514	METAL HOUSEHOLD FURNITURE. . . . .	6	4	.3	2.7	.3	.4	1.8	5.7	4.5	10.1	.2	BB	(D)	
2515	MATTRESSES AND BEDSPRINGS. . . . .	30	9	.5	3.3	.4	.8	2.3	8.9	11.4	20.3	.2	.6	5.9	
252	OFFICE FURNITURE . . . . .	18	10	5.2	58.7	4.1	8.5	44.6	121.3	68.5	187.8	3.6	4.1	76.5	
2521	WOOD OFFICE FURNITURE. . . . .	8	3	.5	3.6	.4	.8	2.7	7.0	4.1	11.0	.1	CC	(D)	
2522	METAL OFFICE FURNITURE . . . . .	10	7	4.7	55.1	3.7	7.7	41.9	114.3	64.4	176.8	3.5	FF	(D)	
2531	PUBLIC BUILDING, RELATED FURNITURE . . . . .	19	11	3.2	28.2	2.0	3.9	15.7	49.6	35.4	83.0	2.5	3.4	41.6	
254	PARTITIONS AND FIXTURES. . . . .	89	37	3.1	27.1	2.3	4.5	16.9	46.4	41.6	87.1	1.8	3.1	33.9	
2541	WOOD PARTITIONS AND FIXTURES . . . . .	60	18	1.7	14.7	1.3	2.4	9.0	26.3	20.9	46.0	1.2	1.7	19.9	
2542	METAL PARTITIONS AND FIXTURES. . . . .	29	19	1.4	12.4	1.1	2.1	8.0	20.1	20.7	41.1	.7	1.4	14.0	
259	MISC. FURNITURE AND FIXTURES . . . . .	31	6	1.8	16.9	1.4	2.7	11.3	54.9	33.7	87.9	3.0	2.2	34.6	
26	PAPER AND ALLIED PRODUCTS. . . . .	248	171	26.0	258.3	20.1	43.5	183.3	482.2	714.4	1 194.3	47.1	28.3	367.0	
2631	PAPERBOARD MILLS . . . . .	17	16	3.5	41.2	2.8	6.8	31.1	75.2	102.0	178.6	9.0	FF	(D)	

See footnotes at end of table

TABLE 3. General Statistics for the State, by Industry Groups and Industries: 1972 and 1967—Continued

(See appendix, Explanation of Terms)

Code	Industry	1972										1967		
		Establishments		All employees		Production workers			Value added by manufacture	Cost of materials <sup>1</sup>	Value of shipments <sup>1</sup>	Capital expenditures <sup>1</sup>	All employees	Value added by manufacture
		Total	With 20 employees or more	Number	Payroll	Number	Man-hours	Wages						
		(number)	(number)	(1,000)	(million dollars)	(1,000)	(million)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(1,000)	(million dollars)
264	MISC. CONVERTED PAPER PRODUCTS . . . . .	92	54	6.7	59.0	5.1	10.2	38.6	126.3	188.7	311.7	6.8	6.6	91.0
2641	PAPER COATING AND GLAZING. . . . .	24	15	2.4	21.4	1.8	3.5	12.6	47.2	62.8	107.6	1.9	2.5	35.8
2642	ENVELOPES. . . . .	9	6	.6	4.8	.4	.9	3.1	8.7	6.0	14.7	.6	.5	5.8
2643	BAGS, EXCEPT TEXTILE BAGS. . . . .	17	8	.6	4.5	.5	.9	2.8	8.1	15.1	23.1	.6	.6	6.8
2645	DIE-CUT PAPER AND BOARD. . . . .	21	13	1.4	13.0	1.1	2.1	9.1	20.7	33.7	54.1	1.3	1.6	19.3
2647	SANITARY PAPER PRODUCTS. . . . .	6	5	.9	8.5	.7	1.5	6.4	22.7	52.2	75.2	1.5	.88	(D)
265	PAPERBOARD CONTAINERS AND BOXES. . . . .	115	80	9.1	83.0	6.9	14.6	57.0	162.7	213.3	376.2	5.6	11.0	121.1
2651	FOLDING PAPERBOARD BOXES. . . . .	17	13	1.6	16.4	1.2	2.9	11.9	28.4	33.0	61.1	1.2	1.7	18.5
2652	SETUP PAPERBOARD BOXES. . . . .	6	5	.4	2.5	.3	.7	1.7	4.1	1.9	5.8	(D)	.5	3.3
2653	CORRUGATED AND SOLID FIBER BOXES . . . . .	76	52	4.6	42.2	3.4	7.0	27.6	75.7	118.0	194.9	2.9	5.0	56.4
2654	SANITARY FOOD CONTAINERS. . . . .	6	5	2.2	19.1	1.7	3.4	13.7	49.2	54.4	102.9	1.2	3.6	38.5
2655	FIBER CANS, DRUMS, SIMILAR PRODUCTS. . . . .	10	5	.3	2.7	.2	.6	2.1	5.3	6.1	11.4	(D)	.3	4.3
27	PRINTING AND PUBLISHING. . . . .	1 477	275	34.6	344.3	21.2	39.6	196.8	696.4	317.5	1 011.4	47.7	33.5	464.0
2711	NEWSPAPERS . . . . .	288	71	13.2	136.4	6.1	11.2	63.5	275.2	82.1	357.0	28.3	11.9	178.5
2721	PERIODICALS. . . . .	58	9	.6	6.2	.2	.4	1.5	15.2	8.0	23.2	.4	.4	11.6
273	BOOKS. . . . .	47	13	2.2	17.8	1.2	2.1	7.9	41.1	21.7	62.2	3.1	2.0	29.5
2741	MISCELLANEOUS PUBLISHING . . . . .	82	10	2.9	25.6	1.9	3.6	16.2	87.5	28.3	115.9	2.4	2.7	47.3
275	COMMERCIAL PRINTING. . . . .	816	109	10.9	110.6	8.1	15.1	74.7	195.0	139.7	334.1	10.7	(NA)	(NA)
2751	COMMERCIAL PRINTING, LETTERPRESS. . . . .	487	40	4.0	35.6	3.1	5.6	25.0	69.4	41.0	110.2	3.4	(NA)	(NA)
2752	COMMERCIAL PRINTING, LITHOGRAPHIC. . . . .	309	65	6.6	72.5	4.8	9.1	47.8	121.4	96.1	217.1	7.2	(NA)	(NA)
2761	MANIFOLD BUSINESS FORMS. . . . .	26	12	1.0	10.3	.6	1.2	5.8	19.2	20.4	39.3	.9	.9	10.0
2782	BLANKBOOKS AND LOOSELEAF BINDERS . . . . .	17	7	.9	6.7	.8	1.7	5.0	14.5	6.4	20.7	.1	.6	8.0
279	PRINTING TRADE SERVICES. . . . .	117	29	1.9	22.3	1.5	2.8	16.2	35.1	6.2	41.2	1.3	(NA)	(NA)
2791	TYPESETTING. . . . .	71	15	1.0	11.6	.8	1.6	8.7	18.1	2.8	20.9	.7	1.2	16.7
28	CHEMICALS AND ALLIED PRODUCTS. . . . .	378	141	34.0	400.6	21.1	41.6	220.3	1 193.7	892.2	2 078.5	68.8	37.2	1 039.2
282	PLASTICS MATERIALS AND SYNTHETICS. . . . .	11	6	4.0	51.2	2.7	5.3	31.6	131.8	93.8	220.5	15.2	(NA)	(NA)
283	DRUGS. . . . .	39	18	7.4	87.0	5.1	9.9	53.5	356.6	130.0	478.6	14.6	7.5	290.8
2844	TOILET PREPARATIONS. . . . .	15	4	.3	2.0	.2	.3	1.0	10.3	5.3	15.7	.5	.88	(D)
2851	PAINTS AND ALLIED PRODUCTS . . . . .	66	30	4.2	52.2	2.3	4.8	23.6	110.3	125.3	234.8	5.8	3.9	87.3
286	INDUSTRIAL ORGANIC CHEMICALS . . . . .	18	10	8.3	105.5	4.9	9.6	56.1	257.6	163.0	429.3	34.9	(NA)	(NA)
287	AGRICULTURAL CHEMICALS . . . . .	26	9	.5	3.7	.3	.5	1.8	8.9	28.3	36.9	.9	(NA)	(NA)
289	MISCELLANEOUS CHEMICAL PRODUCTS. . . . .	101	31	3.6	37.8	2.1	4.5	18.9	113.3	145.9	255.8	5.7	(NA)	(NA)
29	PETROLEUM AND COAL PRODUCTS. . . . .	67	22	2.6	30.6	1.6	3.6	18.4	165.8	336.0	507.6	38.7	FF	(D)
295	PAVING AND ROOFING MATERIALS . . . . .	30	7	.5	5.5	.3	.7	3.7	14.9	27.7	42.7	1.6	.6	11.8
2992	LUBRICATING OILS AND GREASES . . . . .	24	7	.4	3.9	.2	.4	1.6	20.2	14.8	35.1	.6	(NA)	(NA)
30	RUBBER AND MISC. PLASTICS PROD. . . . .	481	231	30.2	264.5	23.8	47.5	181.0	526.8	471.2	984.4	49.4	(NA)	(NA)
3079	MISCELLANEOUS PLASTICS PRODUCTS. . . . .	411	191	19.0	147.3	15.3	29.8	98.6	306.7	274.2	575.1	34.3	(NA)	(NA)
32	STONE, CLAY, AND GLASS PRODUCTS. . . . .	694	193	21.2	223.9	16.2	33.9	156.2	550.7	421.7	964.2	45.5	21.3	410.3
3231	PRODUCTS OF PURCHASED GLASS, NEC . . . . .	44	15	3.2	32.8	2.4	4.8	22.9	85.0	69.7	153.6	6.0	2.4	51.9
3241	CEMENT, HYDRAULIC. . . . .	10	4	1.9	24.9	1.6	3.5	19.1	82.4	44.9	126.8	9.5	2.3	72.8
327	CONCRETE, GYPSUM, PLASTER PRODUCTS . . . . .	483	111	7.1	77.2	5.1	10.7	50.0	168.1	170.8	336.9	15.6	7.4	129.6
3271	CONCRETE BLOCK AND BRICK . . . . .	89	18	1.1	12.4	.7	1.5	7.3	25.8	26.5	52.1	(D)	1.2	19.8
3272	CONCRETE PRODUCTS, NEC . . . . .	171	34	2.5	25.9	2.0	4.2	18.5	56.7	39.0	94.1	3.3	2.4	39.3
3273	READY-MIXED CONCRETE . . . . .	215	53	2.9	32.2	1.9	3.8	19.2	66.7	82.7	149.0	8.6	3.2	57.9
329	MISC. NONMETALLIC MINERAL PRODUCTS . . . . .	113	47	3.7	34.1	2.7	5.5	21.3	76.4	74.8	149.5	3.3	(NA)	(NA)
3291	ABRASIVE PRODUCTS. . . . .	49	19	1.4	13.2	.9	1.8	7.6	28.6	22.2	49.9	1.2	2.0	31.0
3295	MINERALS, GROUND OR TREATED. . . . .	17	9	.5	4.7	.4	.8	3.0	14.0	22.6	36.5	.6	.3	9.0
33	PRIMARY METAL INDUSTRIES . . . . .	544	305	85.9	1 051.0	70.5	148.8	813.7	1 933.5	2 513.5	4 432.1	209.1	97.3	1 481.7
331	BLAST FURNACE, BASIC STEEL PROD. . . . .	62	39	26.7	363.2	21.6	43.8	278.7	779.7	1 310.9	2 080.2	97.8	28.5	559.4
3312	BLAST FURNACES AND STEEL MILLS . . . . .	18	8	19.7	280.1	16.1	32.4	219.9	637.9	937.4	1 570.6	89.0	22.3	470.8
3315	STEEL WIRE AND RELATED PRODUCTS. . . . .	12	7	2.0	22.3	1.6	3.3	15.8	39.3	41.6	80.1	1.9	EE	(D)
3316	COLD FINISHING OF STEEL SHAPES . . . . .	18	13	2.8	35.2	2.2	4.5	24.7	60.6	284.1	340.6	2.9	2.6	30.0
3317	STEEL PIPE AND TUBES . . . . .	14	11	2.2	25.6	1.7	3.5	18.3	41.9	47.8	88.9	4.1	1.8	32.2
332	IRON AND STEEL FOUNDRIES . . . . .	109	82	37.3	478.1	31.0	68.5	381.0	716.5	489.0	1 199.1	75.3	37.5	462.3
3321	GRAY IRON FOUNDRIES. . . . .	77	58	26.1	352.7	22.2	50.4	288.3	507.0	380.7	883.1	53.9	27.6	324.2
3325	STEEL FOUNDRIES, NEC . . . . .	16	8	1.5	15.4	1.3	2.6	11.7	28.6	14.1	42.2	.9	(NA)	(NA)
3341	SECONDARY NONFERROUS METALS. . . . .	15	8	.6	5.6	.5	1.0	3.6	31.4	33.5	67.2	(D)	CC	(D)
335	NONFERROUS ROLLING AND DRAWING . . . . .	52	40	8.2	77.0	6.7	13.3	58.1	158.9	418.5	580.1	21.4	10.1	160.3
3351	COPPER ROLLING AND DRAWING . . . . .	15	13	3.3	32.4	2.8	5.6	26.2	73.7	263.3	341.5	3.9	3.9	78.4
3356	NONFERROUS ROLLING, DRAWING, NEC . . . . .	9	5	.8	9.8	.6	1.3	6.5	20.1	35.3	54.9	4.8	.7	12.6
3357	NONFERROUS WIRE DRAWING, INSULATING. . . . .	11	11	1.5	10.6	1.3	2.5	8.8	25.5	56.3	80.2	.7	2.8	35.3
336	NONFERROUS FOUNDRIES . . . . .	150	74	8.9	82.6	7.4	15.2	61.9	151.7	133.7	286.1	5.1	10.6	130.9
3361	ALUMINUM FOUNDRIES . . . . .	68	32	3.6	33.8	3.0	6.2	25.9	62.1	47.5	110.3	2.3	2.8	33.0
3362	BRASS, BRONZE, AND COPPER FOUNDRIES. . . . .	37	13	1.1	10.9	1.0	1.8	8.3	21.4	20.4	42.2	.8	1.3	18.0
3369	NONFERROUS FOUNDRIES, NEC. . . . .	45	29	4.2	37.9	3.5	7.2	27.7	68.2	65.8	133.7	2.0	6.4	79.9

See footnotes at end of table.



TABLE 3. General Statistics for the State, by Industry Groups and Industries: 1972 and 1967—Continued

(See appendix, Explanation of Terms)

Code	Industry	1972											1967	
		Establishments		All employees		Production workers			Value added by manufacture	Cost of materials <sup>1</sup>	Value of shipments <sup>1</sup>	Capital expenditures, new	All employees	Value added by manufacture
		Total	With 20 employees or more	Number	Payroll	Number	Man-hours	Wages						
		(number)	(number)	(1,000)	(million dollars)	(1,000)	(million)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(1,000)	(million dollars)
3398	METAL HEAT TREATING. . . . .	140	51	3.4	35.5	2.6	5.5	23.8	69.1	47.3	116.0	4.4	(NA)	(NA)
34	FABRICATED METAL PRODUCTS. . . . .	2 241	954	132.8	1 424.5	108.2	223.5	1 066.1	2 777.2	2 551.6	5 311.8	132.1	(NA)	(NA)
341	METAL CANS AND SHIPPING CONTAINERS . . . . .	14	7	.6	6.4	.5	1.1	5.6	23.7	54.2	77.5	.6	(NA)	(NA)
3411	METAL CANS. . . . .	10	6	.5	5.7	.5	1.0	5.0	22.5	51.9	74.0	(D)	88	(D)
342	CUTLERY, HANDTOOLS AND HARDWARE. . . . .	160	77	17.2	180.9	14.2	29.4	137.9	431.9	314.8	734.9	18.7	18.9	333.0
3423	HAND AND EDGE TOOLS, NEC. . . . .	40	16	1.0	8.8	.8	1.4	5.3	19.8	16.5	36.0	2.4	.9	14.9
343	PLUMBING, HEATING, EXC. ELECTRIC. . . . .	41	22	3.1	30.6	2.2	4.2	18.4	67.3	70.2	138.2	3.2	(NA)	(NA)
344	FABRICATED STRUCTURAL METAL PROD. . . . .	485	166	15.2	150.0	11.3	22.5	97.2	276.8	285.5	556.7	12.8	18.7	276.8
3441	FABRICATED STRUCTURAL METAL PRODUCTS . . . . .	93	39	3.0	32.3	2.3	4.5	20.1	56.2	59.5	114.9	1.9	6.4	101.1
3442	METAL DOORS, SASH, AND TRIM. . . . .	100	37	4.5	37.8	3.3	6.8	24.5	76.8	81.8	156.6	4.2	4.9	65.9
3443	FABRICATED PLATEWORK (BOILERS SHOP). . . . .	78	31	2.4	25.9	1.9	3.6	18.7	38.7	31.5	69.5	1.9	2.7	37.5
3444	SHEET METALWORK. . . . .	140	42	4.0	40.5	2.9	5.8	26.3	79.4	88.4	165.4	4.1	3.1	50.8
3446	ARCHITECTURAL METALWORK. . . . .	47	13	1.0	10.6	.7	1.4	6.2	20.1	13.1	33.2	.6	1.1	15.9
345	SCREW MACHINE PRODUCTS, BOLTS, ETC . . . . .	336	156	11.4	121.8	9.1	19.6	85.9	249.7	215.3	460.3	19.0	12.0	191.5
3451	SCREW MACHINE PRODUCTS . . . . .	262	111	6.6	66.1	5.3	11.4	47.3	130.4	116.1	245.1	11.9	6.8	102.1
3452	BOLTS, NUTS, RIVETS, AND WASHERS. . . . .	74	45	4.8	55.7	3.8	8.1	38.6	119.4	99.2	215.2	7.2	5.3	89.4
346	METAL FORGINGS AND STAMPINGS . . . . .	424	255	60.9	720.5	51.3	107.6	570.6	1 309.9	1 314.8	2 628.0	60.7	(NA)	(NA)
3465	AUTOMOTIVE STAMPINGS . . . . .	221	173	51.2	614.7	43.2	91.6	487.1	1 134.8	1 115.7	2 253.7	45.3	(NA)	(NA)
3469	METAL STAMPINGS, NEC. . . . .	171	56	4.7	44.3	3.8	7.6	32.9	81.3	72.7	152.1	10.2	(NA)	(NA)
347	METAL SERVICES, NEC. . . . .	443	123	8.6	64.6	7.1	14.1	46.2	122.2	58.5	180.8	6.7	FF	(D)
3471	PLATING AND POLISHING. . . . .	325	86	6.2	47.8	5.2	10.5	34.6	93.0	44.8	138.0	4.7	6.5	64.2
3479	METAL COATING AND ALLIED SERVICES. . . . .	123	37	2.3	16.8	1.9	3.6	11.7	29.1	13.5	42.6	2.0	FF	(D)
349	MISC. FABRICATED METAL PRODUCTS. . . . .	322	147	15.7	149.1	12.4	24.9	103.6	292.9	237.7	532.4	10.3	(NA)	(NA)
3493	STEEL SPRINGS, EXCEPT WIRE. . . . .	9	7	1.0	11.0	.8	1.7	8.4	20.7	22.9	43.6	.4	EE	(D)
3494	VALVES AND PIPE FITTINGS. . . . .	50	32	4.8	45.8	3.5	6.9	28.7	99.0	77.5	178.9	3.7	4.3	83.4
3495	WIRE SPRINGS. . . . .	21	14	3.5	34.7	2.9	5.8	26.3	62.0	47.1	109.8	1.9	(NA)	(NA)
3496	MISC. FABRICATED WIRE PRODUCTS. . . . .	50	29	2.3	20.5	1.9	3.7	14.3	38.3	30.0	67.9	1.5	(NA)	(NA)
3498	FABRICATED PIPE AND FITTINGS. . . . .	36	20	1.1	9.1	.9	1.7	6.5	17.4	16.7	34.1	.4	1.3	12.8
3499	FABRICATED METAL PRODUCTS, NEC. . . . .	146	40	3.1	27.9	2.4	5.0	19.4	55.5	43.5	98.1	2.3	(NA)	(NA)
35	MACHINERY, EXCEPT ELECTRICAL. . . . .	3 671	1 037	135.3	1 572.9	99.4	205.0	1 063.9	2 949.3	2 541.9	5 421.6	108.3	165.7	2 750.4
351	ENGINES AND TURBINES. . . . .	24	17	11.7	155.2	8.3	17.6	101.2	381.0	443.9	778.8	16.9	FF	(D)
352	FARM AND GARDEN MACHINERY. . . . .	45	20	3.7	40.3	2.6	5.4	26.7	83.7	267.6	34.9	1.7	(NA)	(NA)
353	CONSTRUCTION AND RELATED MACHINERY . . . . .	154	73	15.1	167.4	10.1	19.2	103.1	354.0	417.8	762.3	9.7	20.7	325.8
3532	MINING MACHINERY. . . . .	7	4	.3	3.2	.2	.4	1.8	6.3	4.4	10.5	.1	.3	2.8
3534	ELEVATORS AND MOVING STAIRWAYS. . . . .	6	4	.4	3.9	.2	.4	1.7	7.8	4.0	11.9	.1	.2	3.7
3535	CONVEYORS AND CONVEYING EQUIPMENT. . . . .	64	34	4.0	48.4	2.2	4.5	22.2	95.9	80.6	177.7	(D)	4.5	73.6
354	METALWORKING MACHINERY. . . . .	1 807	533	48.4	604.3	37.0	79.7	426.9	1 025.0	493.5	1 497.7	39.7	64.3	1 096.2
3541	MACHINE TOOLS, METAL CUTTING TYPES . . . . .	166	55	7.3	95.8	4.9	10.4	59.6	166.3	122.3	276.0	6.3	11.4	221.8
3542	MACHINE TOOLS, METAL FORMING TYPES . . . . .	66	20	2.4	28.7	1.7	3.6	18.3	45.0	34.9	77.8	1.5	2.4	38.9
3544	SPECIAL DIES, TOOLS, JIGS, FIXTURES. . . . .	1 204	306	26.0	341.1	21.0	46.7	259.5	540.1	204.3	739.8	23.0	32.3	518.3
3545	MACHINE TOOL ACCESSORIES. . . . .	309	131	10.5	115.9	7.7	15.9	75.8	230.4	99.9	327.7	6.5	16.8	294.4
3549	METALWORKING MACHINERY, NEC. . . . .	50	10	1.4	16.2	1.0	2.0	10.0	28.3	21.2	50.7	1.9	(NA)	(NA)
355	SPECIAL INDUSTRY MACHINERY. . . . .	134	54	5.8	62.8	3.7	7.3	35.1	116.0	83.4	194.6	5.0	7.8	158.2
3551	FOOD PRODUCTS MACHINERY. . . . .	17	11	1.4	17.1	.8	1.6	9.2	25.9	17.0	43.5	.7	2.1	66.4
3555	PRINTING TRADES MACHINERY. . . . .	14	7	.6	5.8	.4	.8	3.5	11.8	6.4	17.7	.3	CC	(D)
3559	SPECIAL INDUSTRY MACHINERY, NEC. . . . .	79	36	3.3	35.4	2.1	4.1	19.1	65.8	54.7	116.0	3.8	4.3	75.7
356	GENERAL INDUSTRIAL MACHINERY. . . . .	373	136	18.3	206.4	13.3	26.2	141.6	371.8	217.8	585.4	13.2	18.2	277.8
3564	FLOWERS AND FANS. . . . .	17	9	1.5	16.1	1.0	1.9	9.0	29.5	18.8	48.2	.7	1.5	24.3
3565	INDUSTRIAL PATTERNS. . . . .	161	32	2.4	33.1	2.0	3.8	27.4	51.4	11.2	61.0	2.2	3.3	57.5
3567	INDUSTRIAL FURNACES AND OVENS. . . . .	31	12	1.1	13.8	.7	1.4	9.1	28.3	16.1	43.0	.8	.7	12.7
3569	GENERAL INDUSTRIAL MACHINERY, NEC. . . . .	72	35	2.8	32.0	1.8	3.7	18.3	59.3	36.7	94.0	1.6	2.3	35.1
357	OFFICE AND COMPUTING MACHINES. . . . .	31	16	5.6	65.8	3.8	7.8	41.6	48.4	89.5	165.4	4.3	FF	(D)
358	REFRIGERATION, SERVICE MACHINERY. . . . .	70	32	10.8	111.7	8.0	15.4	73.6	291.9	390.6	681.7	5.6	11.6	205.0
359	MISC. MACHINERY, EXCEPT ELECTRICAL . . . . .	1 033	156	15.9	159.1	12.6	25.8	114.3	277.6	137.8	411.7	12.0	(NA)	(NA)
36	ELECTRIC, ELECTRONIC EQUIPMENT. . . . .	414	180	37.1	371.6	28.7	59.1	263.7	770.3	731.5	1 484.7	21.0	(NA)	(NA)
361	ELECTRIC DISTRIBUTING EQUIPMENT. . . . .	35	15	1.1	10.2	.6	1.5	6.6	19.6	17.9	37.3	.5	(NA)	(NA)
3612	TRANSFORMERS. . . . .	8	4	.3	2.0	.2	.4	1.3	3.2	3.2	6.1	(D)	.5	9.0
3613	SWITCHGEAR AND SWITCHBOARD APPARATUS . . . . .	27	11	.8	8.2	.6	1.1	5.2	16.4	14.7	31.2	(D)	2.2	24.5
362	ELECTRICAL INDUSTRIAL APPARATUS. . . . .	108	52	7.2	71.9	5.2	11.4	46.5	126.7	81.2	204.8	2.9	8.7	109.0
3621	MOTORS AND GENERATORS. . . . .	14	11	3.0	23.6	2.3	5.0	15.8	35.1	22.0	55.9	.8	3.6	31.6
3622	INDUSTRIAL CONTROLS. . . . .	44	15	1.2	12.0	.7	1.5	6.1	29.0	13.9	42.4	.5	EE	(D)
3623	WELDING APPARATUS, ELECTRIC. . . . .	35	19	2.0	25.2	1.4	3.4	17.3	44.7	35.5	79.2	1.2	2.4	37.3
363	HOUSEHOLD APPLIANCES. . . . .	32	19	7.9	73.9	6.2	12.5	52.2	189.0	232.9	416.1	6.3	10.0	112.4
3634	ELECTRIC HOUSEWARES AND FANS. . . . .	14	5	.4	2.7	.3	.5	1.6	5.6	6.7	12.4	.4	(NA)	(NA)
364	ELECT. LIGHTING AND WIRING EQUIP. . . . .	45	21	1.4	10.8	1.1	2.1	7.2	24.1	24.4	47.8	2.3	1.6	21.3
366	COMMUNICATION EQUIPMENT. . . . .	44	17	2.4	22.3	1.3	2.7	9.5	50.4	58.8	106.0	.9	3.1	45.1
367	ELECTRONIC COMPONENTS AND ACCESS. . . . .	53	20	2.7	18.5	2.0	3.7	10.0	27.4	28.6	58.0	1.2	1.5	9.7
37	TRANSPORTATION EQUIPMENT. . . . .	599	313	310.5	3 989.0	256.9	542.1	3 125.0	8 539.2	15 697.2	24 262.1	(D)	(NA)	(NA)
371	MOTOR VEHICLES AND EQUIPMENT. . . . .	359	225	297.4	3 858.4	247.7	524.8	3 048.3	8 312.9	15 445.1	23 785.4	(D)	291.7	5 556.6

See footnotes at end of table.

TABLE 3. General Statistics for the State, by Industry Groups and Industries: 1972 and 1967—Continued

(See appendix, Explanation of Terms)

Code	Industry	1972											1967	
		Establishments		All employees		Production workers			Value added by manufacture	Cost of materials <sup>1</sup>	Value of shipments <sup>1</sup>	Capital expenditures, new	All employees	Value added by manufacture
		Total	With 20 employees or more	Number	Payroll	Number	Man-hours	Wages						
		(number)	(number)	(1,000)	(million dollars)	(1,000)	(million)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(1,000)	(million dollars)
3711	MOTOR VEHICLES AND CAR BODIES. . . .	37	25	145.8	1 929.9	121.4	256.7	1 518.3	4 475.4	11 321.2	15 859.3	(D)	140.8	3 032.7
3713	TRUCK AND BUS BODIES. . . . .	30	13	2.1	17.2	1.7	3.4	12.5	37.4	41.9	78.7	2.1	1.0	15.8
3714	MOTOR VEHICLE PARTS AND ACCESSORIES. .	282	182	149.1	1 907.7	124.2	264.1	1 514.7	3 794.7	4 075.7	7 835.7	(D)	149.8	2 508.0
3715	TRUCK TRAILERS. . . . .	10	5	.4	3.6	.3	.6	2.8	5.4	6.3	11.6	.3	.2	2.1
372	AIRCRAFT AND PARTS. . . . .	45	24	2.6	27.7	1.7	3.4	15.3	41.1	36.8	77.6	2.7	(NA)	(NA)
3728	AIRCRAFT EQUIPMENT, NEC. . . . .	25	12	1.8	19.6	1.1	2.3	10.6	26.0	26.2	53.3	1.3	(NA)	(NA)
373	SHIP, BOAT BUILDING, REPAIRING. . .	61	13	1.9	15.1	1.6	3.1	11.6	26.6	30.4	56.9	1.3	FF	(D)
379	MISC. TRANSPORTATION EQUIPMENT. .	103	43	5.6	52.5	4.2	7.6	34.2	103.8	135.2	238.5	4.1	(NA)	(NA)
38	INSTRUMENTS AND RELATED PRODUCTS	195	69	10.7	97.4	7.8	15.0	59.9	186.1	111.9	293.2	4.8	(NA)	(NA)
3811	ENGINEERING, SCIENTIFIC INSTRUMENTS.	24	12	3.6	37.0	2.8	5.4	26.3	60.9	35.9	95.3	1.4	5.4	72.3
382	MEASURING AND CONTROLLING DEVICES.	68	25	2.7	26.5	1.8	3.5	13.5	50.8	25.7	73.8	1.4	(NA)	(NA)
3825	INSTRUMENTS TO MEASURE ELECTRICITY. .	21	8	1.1	10.2	.7	1.5	4.6	18.8	10.4	27.0	.5	(NA)	(NA)
3829	MEASURING, CONTROLLING DEVICES, NEC.	36	10	1.2	13.0	.8	1.5	7.0	24.0	11.1	35.0	.6	(NA)	(NA)
3832	OPTICAL INSTRUMENTS AND LENSES. . .	15	4	.4	3.9	.3	.5	1.9	5.3	3.6	9.2	.1	(NA)	(NA)
384	MEDICAL INSTRUMENTS AND SUPPLIES. .	47	17	2.9	21.9	2.2	4.2	13.1	53.7	33.1	85.9	1.3	1.6	19.6
3861	PHOTOGRAPHIC EQUIPMENT AND SUPPLIES.	15	4	.3	2.6	.2	.4	1.6	4.9	7.2	12.0	.4	.3	3.2
3873	WATCHES, CLOCKS, AND WATCHCASES. .	7	5	.5	4.1	.4	.8	2.7	8.1	5.2	13.3	.2	(NA)	(NA)
39	MISC. MANUFACTURING INDUSTRIES. .	430	78	9.9	81.5	7.6	14.1	56.0	159.2	138.4	295.8	5.2	12.2	137.0
391	JEWELRY, SILVERWARE, PLATED WARE. .	30	6	.5	4.1	.3	.6	2.3	7.0	9.3	16.1	.2	.5	7.5
3911	JEWELRY, PRECIOUS METAL. . . . .	22	5	.4	3.6	.3	.5	2.0	6.4	8.0	14.2	.1	.5	6.7
394	TOYS AND SPORTING GOODS. . . . .	101	32	5.1	38.9	3.9	7.5	27.2	85.7	88.2	172.3	2.4	5.1	58.5
3944	GAMES, TOYS, AND CHILDREN'S VEHICLES	15	9	1.5	9.6	1.1	2.0	6.5	23.0	14.9	39.3	.7	(NA)	(NA)
399	MISCELLANEOUS MANUFACTURES. . . .	246	31	2.8	26.6	2.2	4.0	17.7	47.5	27.6	75.6	1.4	4.2	48.3
3993	SIGNS AND ADVERTISING DISPLAYS. . . .	122	13	1.5	16.3	1.1	2.0	10.3	27.2	15.2	42.6	.9	1.7	21.0
3999	MANUFACTURING INDUSTRIES, NEC. . . .	105	12	1.0	7.7	.8	1.5	5.6	14.9	6.4	21.2	.4	2.1	21.8
--	ADMINISTRATIVE AND AUXILIARY. . .	374	221	102.8	1 742.0	-	-	-	-	-	-	-	94.4	-

Note: The following symbols indicate employment size range for 1967:

AA less than 250 employees  
BB 250 to 499 employees  
CC 500 to 999 employeesEE 1,000 to 2,499 employees  
FF 2,500 employees and over

- Represents zero. (NA) Not available. Because of a revision to this industry or industry group in the 1972 edition of the SIC manual, 1967 census data are not available on a comparable basis. (D) Withheld to avoid disclosing figures for individual companies. (Z) Less than half of the unit of measurement shown.

<sup>1</sup>The total cost of materials and value of shipments for industry groups shown may include extensive duplication arising from shipments between establishments in the same industry classification. (For a more complete explanation, see appendix.)<sup>2</sup>Includes figures for industry groups which have been withheld from publication in order to (a) avoid disclosing figures for individual companies or (b) permit further checking of figures for smaller industry groups. Additional detail will appear in the final report for this State.



## Appendix A. SCOPE AND COVERAGE

This report is one of a series presenting preliminary information, by State, from the 1972 Census of Manufactures. The data will be superseded in a final report which, in turn, will be included in *Volume III, Area Statistics, 1972 Census of Manufactures*. The final report will include a comprehensive discussion of the concepts and definitions used in the census.

The census of manufactures covers each manufacturing establishment in the United States with one paid employee or more; manufacturing establishments with no employees are excluded. Firms which operated more than one establishment were required to file a separate report for each location. Companies which engaged in distinctly different lines of activity at one location were asked to submit separate reports if the company records permitted such a separation and the activities were of significant size.

This report includes figures for administrative offices, warehouses, garages, or other auxiliary units which service manufacturing establishments.

In the 1972 census, the approximately 120,000 manufacturing establishments with fewer than 10 employees were excused from filing reports. Under special arrangements which safeguarded the confidentiality of both tax and census records, data on payrolls, sales, and industry classification from the administrative records of the Social Security Administration and the Internal Revenue Service were made available to the Census Bureau for use in the 1972 Economic Censuses (retail and wholesale trade, service industries, construction industries, manufactures, and mineral industries). Estimates for data other than payrolls and sales for these small establishments were constructed from industry averages. The effect on industry aggregates is slight in most industries. For manufacturing as a whole, these small establishments account for less than 3 percent of the payrolls and value added.

Establishments are classified by industry in accordance with industry definitions described in the 1972 edition of the Standard Industrial Classification (SIC) Manual. For 1972, the SIC was significantly revised and the comparability with prior year's data for some industries was significantly affected. The comparability at the 2- and 3-digit SIC levels was less affected. The final volumes of the 1972 Census of Manufactures will contain a table relating aggregates based on the 1972 SIC with aggregates derived from classifying establishments according to the 1967 SIC definitions.

As in earlier censuses, a number of small establishments may have been misclassified as to industry. However, such possible misclassifications have significant effect on *none* of the statistics except the number of establishments. As indicated above, report forms were not mailed to very small establishments (fewer than 10 employees). The industry classifications for these establishments were assigned on the basis of brief descriptions of the general activity of the establishment. Where the description is incomplete or there are relatively fine lines of demarcation among industries or between manufacturing and nonmanufacturing activity, the code assigned to an establishment could differ from that which would have been assigned on the basis of more complete product information. Therefore, the total establishment count for individual industries should be viewed as an approximation rather than a precise measurement. The counts for establishments with 20 employees or more are more reliable than the total number of establishments.

More detailed figures for this State will appear in the final census reports. Final reports will also include a comprehensive discussion of such concepts as "industry" and "establishment," as well as the various statistical items such as "employment," "value of shipments," and "value added." Similar preliminary and final reports will be issued for other States during the coming months. A series of preliminary summary reports showing U.S. totals for each manufacturing industry and for each State are being issued. Final industry reports and final area reports will be published during 1974.

Order forms describing the individual reports and listing their prices may be obtained from any U.S. Department of Commerce district office or from the Publications Distribution Section, Social and Economic Statistics Administration, Washington, D.C. 20233.

The 1972 Census of Manufactures is the 29th census of manufacturing establishments in the United States. For 1972, it was conducted jointly with the censuses of mineral industries, construction industries, retail trade, wholesale trade, and selected services under authority of Title 13 of the United States Code. Title 13 specifies that a census of manufactures be conducted every 5 years and, as amended, to cover years ending in "2" and "7". Title 13 also authorizes an annual sample survey of manufacturing establishments in interim years.



## Appendix B. EXPLANATION OF TERMS

*(For a more complete discussion of these terms and the method of compiling the Census of Manufactures, see the "Introduction" to the 1967 Census of Manufactures, Volume III).*

**All Employees**—All full-time and part-time employees on the payrolls of operating manufacturing establishments for any part of the pay period ending nearest the 12th of the months specified on the report form. Included are all persons on paid sick leave, paid holidays, and paid vacations during these pay periods. Officers of corporations are included as employees; proprietors and partners of unincorporated firms are excluded. The "all employee" number is the average number of production workers for the midmonth payroll period of March, May, August, and November plus the number of nonproduction employees in mid-March.

**Number of Production Workers**—Workers (up through the working foreman level) engaged in fabricating, processing, assembling, inspecting, receiving, packing, warehousing, shipping (but not delivering), and maintenance, repair, janitorial, and watchman services, product development, auxiliary production for plant's own use (e.g., powerplant), recordkeeping, and other closely associated services. Proprietors and partners are excluded.

**Payroll**—This item includes all forms of compensation such as salaries, wages, commissions, dismissal pay, bonuses, vacation and sick leave pay, and compensation in kind, prior to such deductions as employees' Social Security contributions, withholding taxes, group insurance, union dues, and savings bonds. The total includes salaries of officers of these establishments, if a corporation; it excludes payments to the proprietor or partners, if an unincorporated concern. Respondents were told that in reporting they could follow the definition of payrolls used for calculating the Federal withholding tax.

**Man-Hours of Production Workers**—This total relates to production-worker man-hours worked or paid for at the plant including actual overtime hours (not straight-time equivalent hours). It excludes hours paid for vacation, holidays, or sick leave when the employee was not at the plant.

**Cost of Materials**—The term "Cost of Materials" refers to charges actually paid or payable for items consumed or put into production during the year, including freight and other direct charges incurred by the establishment in acquiring these materials. It includes the cost of materials or fuel consumed regardless of

whether these items were purchased by the establishment from other companies, transferred to it from other establishments of the same company, or withdrawn from inventory during the year. The establishment was requested to value materials transferred from other parts of the company at its approximate market value, not at cost of production. The important components of this cost item are (a) all raw materials, semifinished goods, parts, components, containers, scrap, and supplies put into production or used as operating supplies and for repair and maintenance during the year; (b) electric energy purchased; (c) fuels consumed for heat, power, or the generation of electricity; (d) work done by others on materials or parts furnished by manufacturing establishments (contract work); and (e) products bought and resold in the same condition.

**Value of Shipments**—The value of shipments is the received or receivable net selling value, f.o.b. plant (exclusive of freight and taxes), of all products shipped, both primary and secondary, as well as all miscellaneous receipts such as receipts for contract work performed for others, installation and repair, sales of scrap, and sale of products bought and resold without further processing. Included are all items made by the establishment or for it under contract from materials owned by it whether sold, transferred to other plants of the same company, or shipped on consignment. The net selling value of products made in one plant on a contract basis from materials owned by another was reported by the plant providing the materials.

In the case of multiunit companies, the manufacturer was requested to report the value of products transferred to other establishments of the same company at full economic value; i.e., to include not only the direct costs of production but also a reasonable proportion of "all other costs" (including company overhead) and profit.

**Duplication in Cost of Materials and Value of Products**—The aggregate cost of materials and value-of-shipments figures for industry groups and for all manufacturing industries may include large amounts of duplication since the products of some industries are used as materials by others. With some important exceptions, such as motor vehicles and parts, this duplication is not significant within individual industries but arises from the addition of the totals of related industries in successive stages of the production of a finished manufactured product. Examples are the addition of flour mills to bakeries in the food group and the addition of pulp mills to paper mills in the paper and allied products group of industries. Esti-



mates of this duplication indicate that the value of manufactured products exclusive of such duplication—the value of finished manufactures—approximates two-thirds of the total value of products.

Prior to 1962, the Bureau of the Census did not publish figures for cost of materials or value of shipments if they contained significant duplication. Effective with the 1962 annual survey these figures were shown at all industry levels for the United States to meet the requests for their use in studies in which the presence of an indeterminate amount of duplication is not a limiting factor. However, they are appropriately footnoted. Effective with the 1964 annual survey, these industry group totals are also shown at the State, standard metropolitan statistical area, and large-county level.

Even where there is no significant amount of duplication, value-of-shipments figures are deficient as measures of the relative economic importance of individual manufacturing industries or geographic areas because of the wide variation in ratio of materials, labor, and other processing costs to value of shipments among industries.

**Value Added by Manufacture**—This measure of manufacturing activity is derived by subtracting the cost of materials, supplies, containers, fuel, purchased electricity, and cost of resales contract work from the value of shipments for products manufactured plus resales and receipts for services rendered. The result of this calculation is adjusted by the net change in finished goods and work-in-process inventories between the beginning and end of the year. (In the few industries that report value of production rather than value of shipments, only changes in work-in-process inventories are used to adjust value added. In the shipbuilding and repairing industry, no inventory adjustment is made.)

“Value added” avoids the duplication in the value of shipments figure which results from the use of products of some establishments as materials by others. Value added is considered to be the best value measure available for comparing the relative economic importance of manufacturing among industries and geographic areas.

**Expenditures for Plant and Equipment**—Manufacturing establishments in operation and establishments under construction but not yet in operation, were asked to report their expenditures for (a) permanent additions and major alterations to the manufacturing establishment, and (b) new machinery and equipment used for replacement purposes and additions to plant capacity if they are of the type for which depreciation accounts are ordinarily maintained.

These totals exclude expenditures for new facilities and equipment leased from nonmanufacturing concerns; new facilities owned by the Federal Government but operated under contract by private companies; and plant and equipment furnished to the manufacturer by communities and nonprofit organizations. Expenditures for used plant and equipment (although reported in the census), expenditures for land, and cost of maintenance and repairs charged as current operating expense are also omitted from the figures for new capital expenditures.

**Central Administrative Offices and Auxiliary Units**—In the 1972 census as in previous years, respondents were asked to file separate reports for central administrative offices or auxiliary units which were (1) at different locations from the establishments served or, (2) at the same location as one of these establishments but were not operated as an integral part thereof and served two or more establishments. The functions of employees in central administrative offices include general company policy determination, planning and management (that is, company purchasing, accounting, general engineering, direction of company personnel matters, and legal and patent matters). Auxiliaries are storage facilities, garages, repair shops, purchasing offices, sales promotion offices, and research laboratories serving the plants or central management of the company.

**Standard Metropolitan Statistical Areas**—Standard metropolitan statistical areas (SMSA) are integrated economic and social units with a large volume of daily travel and communication between the central city and outlying parts of the area.<sup>1</sup> Each area (except in New England) consists of one whole county or more. An area may contain not only highly industrialized counties but also adjoining counties which, though primarily residential in character, contribute significantly to the industrial counties' labor force and are socially and economically integrated with the central city. These areas are defined by the Federal Committee on Standard Metropolitan Statistical Areas of the Office of Management and Budget for general-purpose use throughout the Federal Government in presenting economic and social data. In the New England States, similar intergration criteria are applied in defining

<sup>1</sup> Each standard metropolitan statistical area must include either (1) a city with 50,000 or more inhabitants, or (2) a city having a population of at least 25,000 which (a) with the addition of the population of contiguous places has a population density of at least 1,000 persons per square mile; (b) constitutes, for general economic and social purposes, a single community with a combined population of at least 50,000; and (c) includes a total population of at least 75,000 in the county or counties in which the city and contiguous places are located.

SMSA's on a city and town basis because towns rather than counties are regarded as the significant unit in this region of the country.

The requirement that each SMSA consist of county units (except in New England) sometimes results in the inclusion in an area of considerable amount of territory which would not ordinarily be considered "metropolitan," much less "industrial." It is recognized that metropolitan areas could be more accurately defined in terms of smaller area segments such as minor civil

divisions, but the usefulness of areas so defined would be limited by the fact that many types of economic and social data are available only on a county basis.

Each SMSA is designated by the name of the principal city of the area. In addition to the name of the principal city, the area title may include one or two additional city names.

The data for SMSA's which changed definition since the 1967 census have not been retabulated on the new basis for years prior to 1972.



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# 1972 CENSUS OF MANUFACTURES

## AREA SERIES

C72(P)-S24

U. S. DEPARTMENT OF COMMERCE • Social and Economic Statistics Administration • BUREAU OF THE CENSUS

Issued April 1974

## Minnesota

Value added by manufacturing in 1972 in the State of Minnesota amounted to \$5,551 million a 36-percent increase from 1967.

This report presents preliminary results from the 1972 Census of Manufactures for the State, its Standard Metropolitan Statistical Areas, and its counties.

Data are provided for industry groups within the State. Historical data, back to 1958, are included for the State as a whole,

and 1967 figures on employment and value added are provided for the smaller areas.

The figures in this report have been subjected to only preliminary review and must be regarded as approximations of the final census figures. No adjustments have been made in the value figures for changes in price level.

For an explanation of the terms used in the tables, see the appendix at the end of this report.

TABLE 1. General Statistics for the State: 1972 and Earlier Years

(See appendix, Explanation of Terms)

Year	Establishments		All employees		Production workers			Value added by manufacture	Cost of materials	Value of shipments	Capital expenditures, new
	Total	With 20 employees or more	Number	Payroll	Number	Man-hours	Wages				
	(number)	(number)	(1,000)	(million dollars)	(1,000)	(millions)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(million dollars)
MINNESOTA											
1972 Census .....	5,602	1,896	300.0	2,869.2	194.6	381.0	1,546.6	5,551.4	7,454.2	12,893.3	304.1
1967 Census .....	5,409	1,778	299.8	2,106.5	198.8	398.7	1,177.6	4,080.2	5,449.1	9,443.2	231.3
1966 ASM .....	(NA)	(NA)	281.2	1,893.1	190.6	385.7	1,098.6	3,823.6	5,004.3	8,702.4	210.5
1965 ASM .....	(NA)	(NA)	258.6	1,672.0	173.0	351.2	970.5	3,394.4	4,442.2	7,721.3	160.1
1964 ASM .....	(NA)	(NA)	252.0	1,599.6	166.2	338.3	904.3	3,043.9	4,221.1	7,248.1	167.3
1963 Census .....	5,500	1,587	245.9	1,478.6	165.6	331.6	865.4	2,806.1	(NA)	(NA)	159.1
1962 ASM .....	(NA)	(NA)	238.9	1,390.0	162.0	319.3	812.1	2,643.7	(NA)	(NA)	139.4
1961 ASM .....	(NA)	(NA)	230.4	1,298.4	155.6	309.2	753.2	2,476.0	(NA)	(NA)	139.8
1960 ASM .....	(NA)	(NA)	229.8	1,247.7	157.0	310.2	730.0	2,375.2	(NA)	(NA)	116.9
1959 ASM .....	(NA)	(NA)	225.5	1,170.5	154.2	306.2	695.9	2,339.0	(NA)	(NA)	104.9
1958 Census .....	5,380	1,433	220.8	1,094.8	149.6	293.9	654.9	2,050.4	(NA)	(NA)	108.5

Note: "ASM" data are based on a representative sample of manufacturing establishments canvassed in the Annual Survey of Manufactures. These estimates may differ from the results of a complete canvass of all manufacturing establishments. The standard errors associated with these estimates are published in the annual survey of manufactures volumes for this period.

(NA) Not available.

<sup>1</sup>Includes employment and payroll at central administrative offices and auxiliary units. (For a definition of these units, see appendix.)

<sup>2</sup>The total cost of materials and value of shipments may include extensive duplication arising from shipments between establishments in the same industry classification. (For a more complete explanation, see appendix.)

TABLE 2. General Statistics for the State, Standard Metropolitan Statistical Areas, and Counties: 1972 and 1967

(See appendix, Explanation of Terms)

State, standard metropolitan statistical areas, and counties <sup>1</sup>	1972											1967	
	Establishments		All employees <sup>2</sup>		Production workers			Value added by manufacture	Cost of materials <sup>3</sup>	Value of shipments <sup>3</sup>	Capital expenditures, new	All employees	Value added by manufacture
	Total	With 20 employees or more	Number	Payroll	Number	Man-hours	Wages						
	(number)	(number)	(1,000)	(million dollars)	(1,000)	(million)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(1,000)	(million dollars)
MINNESOTA, TOTAL . . . . .	5 602	1 896	300.0	2 869.2	194.6	381.0	1 546.6	5 551.4	7 454.2	12 893.3	304.1	299.8	4 080.2
STANDARD METROPOLITAN STATISTICAL AREAS <sup>4</sup>													
DULUTH-SUPERIOR . . . . .	322	87	10.4	85.0	7.7	15.1	55.7	167.1	251.3	414.2	15.5	12.0	137.6
PORTION IN WISCONSIN . . . . .	42	17	1.6	13.7	1.0	2.2	9.3	36.7	93.1	129.7	6.5	1.4	23.6
PORTION IN MINNESOTA . . . . .	280	70	8.8	71.3	6.7	12.9	46.4	130.4	158.3	284.5	9.0	10.6	114.0
FARGO-MOORHEAD . . . . .	113	33	3.4	27.4	2.4	4.8	17.6	60.1	131.5	191.2	2.4	2.5	31.7
PORTION IN MINNESOTA . . . . .	27	5	1.2	8.7	.9	1.7	6.0	21.5	27.5	48.9	.7	.7	11.5
PORTION IN NORTH DAKOTA . . . . .	86	28	2.2	18.7	1.5	3.1	11.6	38.6	104.1	142.3	1.7	1.8	20.1
MINNEAPOLIS-ST. PAUL . . . . .	3 169	1 209	198.3	2 039.3	117.7	230.7	1 010.3	3 780.1	3 973.6	7 663.0	169.6	209.6	2 904.7
PORTION IN WISCONSIN . . . . .	45	16	1.9	14.4	1.4	2.8	9.1	39.6	51.7	90.0	3.0	1.2	18.1
PORTION IN MINNESOTA . . . . .	3 124	1 193	196.4	2 024.9	116.3	227.9	1 001.2	3 740.5	3 921.9	7 573.0	166.6	208.4	2 886.6
ROCHESTER . . . . .	62	22	6.6	83.2	2.9	5.9	27.1	106.2	149.3	258.9	12.5	6.3	79.6
ST. CLOUD . . . . .	169	57	7.4	57.6	5.7	11.3	40.6	126.0	155.9	378.4	15.0	6.5	72.3
COUNTIES													
AITKIN . . . . .	28	6	.4	2.1	.3	.5	1.4	3.6	7.3	10.8	.2	.4	2.3
ANOKA . . . . .	176	52	12.0	119.0	8.6	17.5	78.7	246.5	209.2	447.7	9.1	8.7	103.8
BECKER . . . . .	28	8	.7	4.8	.6	1.3	3.8	12.8	26.4	38.6	1.3	.5	5.1
BELTRAMI . . . . .	40	5	.4	2.7	.3	.6	1.8	6.5	5.3	11.9	.5	.3	3.2
BLUE EARTH . . . . .	67	27	3.4	28.3	2.5	5.1	19.0	52.4	190.8	243.5	4.3	3.0	46.4
BROWN . . . . .	47	21	2.7	21.2	2.1	4.1	14.4	77.5	219.3	295.5	3.0	2.1	44.2
CARLTON . . . . .	28	7	3.6	31.2	2.8	5.7	22.6	63.2	81.1	143.6	11.9	3.7	43.1
CARVER . . . . .	50	15	.9	7.5	.6	1.3	4.5	18.9	38.8	57.2	2.3	1.0	12.3
CASS . . . . .	36	3	.3	2.0	.2	.5	1.4	4.2	6.2	9.8	.5	.4	2.6
CHIPPEWA . . . . .	23	4	.3	1.9	.2	.4	1.3	3.6	6.4	10.3	.6	.1	1.5
CHISAGO . . . . .	25	11	.7	4.7	.2	1.2	3.5	12.3	15.6	27.8	1.5	.2	2.9
CLAY . . . . .	27	5	1.2	8.7	.9	1.7	6.0	21.5	27.4	48.9	.7	.7	11.5
CROW WING . . . . .	52	12	1.8	14.8	1.3	2.2	8.8	25.1	48.6	69.9	3.0	1.5	16.0
DAKOTA . . . . .	136	56	8.8	85.1	5.6	11.5	53.4	138.5	454.7	592.7	6.6	10.1	126.5
DOUGLAS . . . . .	32	9	.7	5.8	.5	1.1	3.7	14.7	38.6	52.9	1.1	.5	5.6
FARIBAULT . . . . .	28	12	1.4	8.0	1.2	2.2	6.1	24.1	22.1	45.6	.7	1.1	12.8
FILLMORE . . . . .	23	5	.5	2.7	.4	.8	2.1	5.9	25.3	31.5	.3	.3	3.0
FREEBORN . . . . .	48	19	4.4	40.8	3.3	7.0	27.8	82.4	264.6	345.9	2.6	4.2	49.8
GOODHUE . . . . .	57	28	3.7	29.9	2.9	5.6	20.0	62.6	103.3	164.7	5.1	3.0	35.7
HENNEPIN . . . . .	1 890	715	99.5	1 007.9	57.4	111.9	468.2	1 663.7	1 423.9	3 066.9	77.4	108.6	1 334.5
ISANTI . . . . .	25	9	.5	4.2	.4	.7	2.4	7.9	11.9	19.0	1.1	.3	3.6
ITASCA . . . . .	70	9	1.4	13.0	1.1	2.0	9.3	25.4	30.8	56.2	1.5	1.2	21.2
KANABEC . . . . .	15	3	.3	2.1	.2	.5	1.4	5.2	6.3	11.4	.5	.3	3.1
KANDIYOH . . . . .	42	12	1.6	9.2	1.3	2.6	6.3	28.2	41.5	69.3	.9	1.3	11.3
LAKE . . . . .	13	4	.3	2.3	.3	.5	1.8	4.5	5.4	10.1	.7	.2	2.0
LE SUEUR . . . . .	35	15	2.3	17.9	1.3	2.7	8.1	34.5	48.0	82.5	1.6	1.9	23.8
LYON . . . . .	27	12	1.1	6.4	.9	1.8	4.6	23.2	35.9	58.9	.7	.7	6.0
MC LEOD . . . . .	47	19	4.1	34.5	3.2	6.4	21.8	164.0	117.6	282.9	5.2	3.1	86.1
MARTIN . . . . .	29	8	1.6	11.6	1.3	2.6	7.8	36.1	25.4	62.0	1.9	1.6	23.2
MEeker . . . . .	32	9	.9	5.6	.7	1.4	4.2	8.9	44.2	52.7	1.1	.7	6.0
MILLE LACS . . . . .	33	13	1.1	6.6	.9	1.9	5.1	12.0	21.7	33.5	.8	.7	6.4
MORRISON . . . . .	31	7	1.6	8.9	1.3	2.4	7.1	17.0	27.2	43.7	.5	.8	8.7
NICOLLET . . . . .	30	6	.6	3.8	.4	.9	2.5	9.4	8.0	17.9	.4	.9	8.2
NOBLES . . . . .	21	7	1.4	10.2	1.2	2.4	8.2	15.7	68.6	85.1	1.3	(D)	(D)
OLMSTED . . . . .	62	22	6.6	83.2	2.9	5.9	27.1	106.2	149.3	258.9	12.5	6.3	79.6
OTTER TAIL . . . . .	52	15	1.5	8.0	1.0	1.9	5.3	18.9	66.0	85.2	1.7	1.2	13.0
PINE . . . . .	19	5	.3	2.7	.2	.4	1.4	6.7	15.9	22.4	.2	.2	2.3
POLK . . . . .	49	12	1.1	7.7	.9	1.7	5.3	18.7	34.2	52.6	1.8	1.0	17.0
RAMSEY . . . . .	659	284	65.2	709.8	36.7	71.5	336.3	1 432.7	1 458.6	2 835.7	57.6	72.3	1 140.0
RED LAKE . . . . .	17	5	.4	2.8	.3	.6	1.5	5.1	9.0	14.1	.1	(D)	(D)
REDWOOD . . . . .	25	4	.5	2.8	.3	.7	1.9	10.5	8.6	17.3	.2	.2	1.0
RENNVILLE . . . . .	32	5	.4	2.2	.4	.7	1.7	5.7	6.7	12.3	.2	.4	4.2
RICE . . . . .	40	19	2.1	16.1	1.6	3.2	10.8	36.3	56.8	93.2	2.0	2.6	26.7
ROSEAU . . . . .	25	5	1.5	10.9	1.2	2.3	6.5	18.9	35.6	54.4	.6	.5	4.6
ST. LOUIS . . . . .	280	70	8.8	71.3	6.7	12.9	46.4	130.4	158.3	284.5	9.0	10.6	114.0
SCOTT . . . . .	60	23	2.5	23.0	1.9	3.8	15.9	57.8	72.9	129.8	2.9	2.4	38.7
SIBLEY . . . . .	14	5	.6	3.5	.5	1.0	2.7	10.6	19.5	28.0	.7	.7	8.1
STEARNS . . . . .	119	43	5.6	43.4	4.4	8.7	31.2	98.4	236.3	330.8	10.7	5.6	60.0
STEELE . . . . .	53	22	3.0	23.1	2.3	4.5	14.1	49.1	66.4	113.0	3.4	3.0	26.9
SWIFT . . . . .	15	4	.7	4.3	.6	1.2	3.4	6.5	11.0	17.3	.6	.5	4.8
TODD . . . . .	20	6	.6	4.5	.5	1.0	3.7	9.5	45.0	54.2	.7	.7	8.4
WABASHA . . . . .	31	8	1.2	9.1	.9	1.9	6.7	20.1	41.7	61.0	2.1	1.0	18.5
WADENA . . . . .	19	3	.4	1.9	.3	.6	1.5	4.4	5.9	10.1	.5	.1	1.3
WASECA . . . . .	27	8	2.4	17.4	1.9	3.8	12.6	41.0	37.7	78.2	6.5	1.6	31.3
WASHINGTON . . . . .	71	25	5.4	60.7	3.8	7.4	35.9	155.6	229.7	382.3	8.5	4.0	114.6
WATONWAN . . . . .	17	6	1.3	7.1	1.1	2.1	5.9	11.0	29.7	41.5	1.8	1.2	11.5
WINONA . . . . .	88	45	5.4	38.5	4.1	7.8	24.0	79.9	93.0	173.8	4.7	4.3	55.9
WRIGHT . . . . .	57	12	1.4	7.2	1.0	1.8	4.8	14.5	18.5	32.9	.7	1.1	13.3
YELLOW MEDICINE . . . . .	12	3	.5	3.4	.4	.7	2.5	9.0	20.1	28.0	.4	.4	2.7

(D) Withheld to avoid disclosing figures for individual companies.

<sup>1</sup>Some counties were withheld from publication in order to (a) avoid disclosing figures for individual companies or (b) permit further checking of the figures for smaller counties.

Additional detail will appear in the final report for this State.

<sup>2</sup>Includes employment and payroll at central administrative offices and auxiliary units. (For a definition of these units, see appendix.)<sup>3</sup>The total cost of materials and value of shipments may include extensive duplication arising from shipments between establishments in the same industry classification. (For a more complete explanation, see appendix.)<sup>4</sup>The standard metropolitan statistical areas in this State are defined as follows:

DULUTH-SUPERIOR, MN-WI, SMSA: Consists of St. Louis County, MN, and Douglas County, WI.

FARGO-MOORHEAD, ND-MN, SMSA: Consists of Cass County, ND, and Clay County, MN.

MINNEAPOLIS-ST. PAUL, MN-WI, SMSA: Consists of Anoka, Carver, Chisago, Dakota, Hennepin, Ramsey, Scott, Washington, and Wright Counties, MN, AND St. Croix County, WI.

ROCHESTER SMSA: Coextensive with Olmsted County, MN.

ST. CLOUD SMSA: Consists of Benton, Sherburne and Stearns Counties, MN.



TABLE 3: General Statistics for the State, by Industry Groups and Industries: 1972 and 1967

(See appendix, Explanation of Terms)

Code	Industry	1972										1967		
		Establishments		All employees		Production workers			Value added by manufacture	Cost of materials <sup>1</sup>	Value of shipments <sup>1</sup>	Capital expenditures	All employees	Value added by manufacture
		Total	With 20 employees or more	Number	Payroll	Number	Man-hours	Wages						
		(number)	(number)	(1,000)	(million dollars)	(1,000)	(million)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(1,000)	(million dollars)
	ALL INDUSTRIES, TOTAL, <sup>2</sup> . . . . .	5 602	1 896	300.0	2 869.2	194.6	381.0	1 546.6	5 551.4	7 454.2	12 893.3	304.1	299.8	4 080.2
20	FOOD AND KINDRED PRODUCTS. . . . .	719	329	45.9	393.4	33.9	67.1	267.9	930.4	3 403.8	4 333.8	52.2	48.8	754.3
201	MEAT PRODUCTS. . . . .	81	49	15.9	151.4	12.8	25.0	115.8	253.4	1 445.7	1 700.0	8.8	19.3	222.3
2011	MEATPACKING PLANTS. . . . .	40	16	10.2	120.1	7.7	15.5	91.3	192.4	1 243.3	1 435.3	4.3	13.3	183.0
2013	SAUSAGES AND OTHER PREPARED MEATS. . . . .	15	10	.7	6.5	.6	1.0	4.1	8.8	45.2	53.8	1.3	1.3	12.5
2017	POULTRY AND EGG PROCESSING. . . . .	12	11	3.2	16.1	2.9	5.6	13.4	30.1	88.0	120.2	1.7	(NA)	(NA)
202	DAIRY PRODUCTS. . . . .	252	86	7.6	63.4	4.8	10.0	38.4	151.3	916.0	1 067.2	11.2	8.5	115.2
2021	CREAMERY BUTTER. . . . .	58	11	1.1	7.6	.8	1.7	6.0	24.4	248.6	272.3	1.5	2.3	32.6
2022	CHEESE, NATURAL AND PROCESSED. . . . .	24	13	1.6	13.3	1.5	3.0	11.1	34.1	279.4	314.6	2.6	1.1	12.6
2023	CONDENSED AND EVAPORATED MILK. . . . .	17	13	.7	6.7	.5	1.1	4.2	17.2	92.5	109.8	1.8	1.2	14.8
2024	ICE CREAM AND FROZEN DESSERTS. . . . .	13	8	.5	4.5	.4	.8	2.7	12.0	24.5	36.6	.6	.7	10.2
2026	FLUID MILK. . . . .	140	41	3.6	31.3	1.7	3.5	14.4	63.6	270.9	333.8	4.6	3.2	45.0
203	PRESERVED FRUITS AND VEGETABLES. . . . .	57	41	7.6	43.0	6.7	12.6	32.4	135.5	159.8	295.3	9.3	(NA)	(NA)
2033	CANNED FRUITS AND VEGETABLES. . . . .	25	22	3.7	19.4	3.2	5.7	14.0	63.0	73.1	136.0	4.0	3.0	62.1
2037	FROZEN FRUITS AND VEGETABLES. . . . .	5	5	1.2	7.1	1.1	2.2	6.0	23.5	19.2	42.7	1.3	(NA)	(NA)
2038	FROZEN SPECIALTIES. . . . .	13	7	1.9	11.8	1.8	3.4	9.3	27.5	43.6	71.3	2.9	(NA)	(NA)
204	GRAIN MILL PRODUCTS. . . . .	103	38	3.1	27.9	2.2	4.8	18.2	98.6	316.1	413.3	6.2	3.0	72.3
2041	FLOUR AND OTHER GRAIN MILL PRODUCTS. . . . .	17	15	1.0	11.2	.8	1.9	8.4	34.6	190.1	223.2	2.5	1.1	27.9
205	BAKERY PRODUCTS. . . . .	66	29	3.0	24.7	1.9	3.6	15.0	51.2	34.4	85.6	1.0	3.5	38.3
206	SUGAR AND CONFECTIONERY PRODUCTS. . . . .	16	11	1.7	14.0	1.5	3.0	11.0	38.0	69.5	107.7	2.0	(NA)	(NA)
207	FATS AND OILS. . . . .	29	17	1.1	11.4	.9	1.9	8.6	37.6	279.4	315.0	4.3	(NA)	(NA)
2077	ANIMAL AND MARINE FATS AND OILS. . . . .	20	9	.4	3.2	.3	.7	2.5	7.9	8.8	16.5	1.1	.4	5.8
208	BEVERAGES. . . . .	70	40	4.4	44.7	2.3	4.6	23.3	128.5	136.7	267.8	8.3	4.5	119.9
2082	MALT BEVERAGES. . . . .	7	5	1.8	22.0	1.1	2.3	14.4	73.7	50.6	125.0	(D)	EE	(D)
209	MISC. FOODS AND KINDRED PRODUCTS. . . . .	45	18	1.4	12.9	.8	1.6	5.4	36.2	46.2	81.9	1.1	(NA)	(NA)
2099	FOOD PREPARATIONS, NEC. . . . .	26	13	1.0	9.2	.6	1.1	3.5	24.8	29.0	53.7	.8	1.1	30.0
22	TEXTILE MILL PRODUCTS. . . . .	22	16	2.7	17.8	2.4	4.7	14.4	34.7	30.8	66.6	2.6	2.6	21.0
225	KNITTING MILLS. . . . .	8	7	1.5	8.6	1.3	2.4	7.1	10.8	14.3	24.7	1.3	1.7	5.2
23	APPAREL, OTHER TEXTILE PRODUCTS. . . . .	162	70	6.9	35.3	6.0	10.7	26.7	65.8	65.3	129.8	3.8	8.9	62.8
232	MEN'S AND BOYS' FURNISHINGS. . . . .	27	20	2.5	12.5	2.3	4.1	10.2	28.5	26.5	54.0	.8	2.2	20.0
2321	MEN'S AND BOYS' SHIRTS AND NIGHTWEAR. . . . .	7	5	.9	4.2	.9	1.4	3.8	10.3	13.5	23.8	.4	CC	(D)
2329	MEN'S AND BOYS' CLOTHING, NEC. . . . .	14	11	1.1	6.2	1.0	1.8	4.4	12.6	7.2	18.8	(D)	CC	(D)
233	WOMEN'S AND MISSES' OUTERWEAR. . . . .	29	16	1.1	5.6	1.0	1.9	4.5	9.3	8.5	17.6	.1	1.6	11.9
2337	WOMEN'S AND MISSES' SUITS AND COATS. . . . .	10	10	.7	3.7	.6	1.2	3.0	6.2	5.6	11.7	.1	.9	6.0
239	MISC. FABRICATED TEXTILE PRODUCTS. . . . .	75	16	1.4	7.2	1.1	2.2	5.0	8.9	15.1	24.1	1.1	2.4	10.5
2392	HOUSEFURNISHINGS, NEC. . . . .	14	6	.6	2.9	.5	1.0	2.1	3.6	3.5	7.1	.9	.4	1.6
24	LUMBER AND WOOD PRODUCTS. . . . .	551	90	9.2	73.2	7.7	14.7	54.0	145.9	210.1	352.1	10.7	(NA)	(NA)
2411	LOGGING CAMPS, LOGGING CONTRACTORS. . . . .	218	7	.9	4.9	.8	1.3	3.8	10.8	22.3	33.0	1.4	1.2	8.2
242	SAWMILLS AND PLANING MILLS. . . . .	110	19	1.1	7.0	.9	1.8	5.5	14.2	19.4	33.8	.8	.8	6.7
243	MILLWORK, PLYWOOD, STRUC. MEMBERS. . . . .	112	29	4.4	40.0	3.6	6.8	29.0	75.1	95.1	166.9	5.2	(NA)	(NA)
244	WOOD CONTAINERS. . . . .	16	5	.4	2.3	.4	.7	1.8	3.0	4.4	7.1	.2	(NA)	(NA)
2441	NAILED WOOD BOXES AND SHOOK. . . . .	9	2	.3	1.5	.2	.4	1.2	2.0	2.8	4.5	.1	.2	1.7
245	WOOD BUILDINGS AND MOBILE HOMES. . . . .	22	15	1.1	9.5	1.0	1.8	7.0	22.9	48.0	70.6	1.5	(NA)	(NA)
249	MISCELLANEOUS WOOD PRODUCTS. . . . .	74	16	1.3	9.5	1.1	2.2	6.8	19.9	21.0	40.7	1.6	(NA)	(NA)
25	FURNITURE AND FIXTURES. . . . .	103	37	4.1	33.0	3.2	6.4	21.6	58.4	41.2	99.0	2.0	3.3	37.4
251	HOUSEHOLD FURNITURE. . . . .	44	17	1.8	11.8	1.5	3.0	7.8	19.0	17.7	36.8	1.0	(NA)	(NA)
2515	MATTRESSES AND BEDSPRINGS. . . . .	12	5	.5	4.3	.3	.5	2.0	6.2	7.3	13.6	.1	.7	7.8
254	PARTITIONS AND FIXTURES. . . . .	34	12	1.6	15.2	1.2	2.4	10.4	26.6	15.8	42.4	.6	.9	12.9
2542	METAL PARTITIONS AND FIXTURES. . . . .	9	4	.5	4.6	.4	.8	3.2	7.4	5.8	12.9	(D)	CC	(D)
26	PAPER AND ALLIED PRODUCTS. . . . .	94	62	18.2	183.8	14.5	29.0	135.6	513.3	382.6	889.4	34.2	17.7	358.5
2621	PAPERMILLS, EXCEPT BUILDING PAPER. . . . .	7	7	4.5	46.4	3.6	7.4	35.8	79.5	104.6	183.2	15.0	FF	(D)
2643	BAGS, EXCEPT TEXTILE BAGS. . . . .	6	4	.4	2.9	.3	.7	2.4	5.4	8.2	13.4	.3	BB	(D)
265	PAPERBOARD CONTAINERS AND BOXES. . . . .	40	32	3.6	33.6	2.8	5.5	22.6	68.4	87.2	155.6	3.2	FF	(D)
2651	FOLDING PAPERBOARD BOXES. . . . .	12	8	1.1	10.0	.9	1.8	7.4	19.2	20.0	39.1	1.3	EE	(D)
2653	CORRUGATED AND SOLID FIBER BOXES. . . . .	20	20	2.2	20.9	1.6	3.2	13.1	44.3	58.1	102.3	1.6	EE	(D)
27	PRINTING AND PUBLISHING. . . . .	884	183	21.7	212.6	13.5	25.0	120.8	399.3	195.3	592.1	22.6	23.6	278.1
2711	NEWSPAPERS. . . . .	274	35	6.8	62.5	3.1	5.4	28.8	119.5	35.8	155.3	4.1	6.8	81.7
2721	PERIODICALS. . . . .	50	7	.9	9.6	.2	.4	.9	26.2	9.1	35.3	(D)	CC	(D)
273	BOOKS. . . . .	29	9	2.6	28.8	1.7	3.0	14.0	53.8	20.3	74.8	.7	2.7	28.4
275	COMMERCIAL PRINTING. . . . .	414	92	8.6	86.5	6.6	12.6	61.1	155.4	106.4	258.5	13.3	(NA)	(NA)
2751	COMMERCIAL PRINTING, LETTERPRESS. . . . .	227	25	2.2	17.2	1.7	3.2	11.8	33.3	23.0	55.9	2.4	(NA)	(NA)
2752	COMMERCIAL PRINTING, LITHOGRAPHIC. . . . .	178	66	6.2	67.4	4.8	9.1	48.1	117.0	81.3	195.5	10.7	(NA)	(NA)
2753	ENGRAVING AND PLATE PRINTING. . . . .	12	4	.3	1.9	.2	.4	1.2	5.2	2.1	7.1	.2	(NA)	(NA)

See footnotes at end of table.

TABLE 3. General Statistics for the State, by Industry Groups and Industries: 1972 and 1967—Continued

(See appendix, Explanation of Terms)

Code	Industry	1972											1967	
		Establishments		All employees		Production workers			Value added by manufacture	Cost of materials <sup>1</sup>	Value of shipments <sup>1</sup>	Capital expenditures, new	All employees	Value added by manufacture
		Total	With 20 employees or more	Number	Payroll	Number	Man-hours	Wages						
		(number)	(number)	(1,000)	(million dollars)	(1,000)	(million)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(1,000)	(million dollars)
279	PRINTING TRADE SERVICES, . . . . .	38	13	.7	8.9	.6	1.0	6.4	13.5	2.6	16.1	(D)	(NA)	(NA)
28	CHEMICALS AND ALLIED PRODUCTS, .	172	45	6.1	62.9	3.7	7.3	29.9	261.5	200.3	456.7	9.8	6.1	225.6
2851	PAINTS AND ALLIED PRODUCTS . . . . .	24	9	.8	7.3	.3	.6	2.8	20.9	18.8	39.3	.8	.6	9.1
287	AGRICULTURAL CHEMICALS . . . . .	34	3	.3	2.0	.2	.4	1.1	5.0	14.6	19.7	1.1	(NA)	(NA)
289	MISCELLANEOUS CHEMICAL PRODUCTS, .	37	11	1.9	25.1	1.2	2.4	11.5	89.3	63.2	152.0	4.7	(NA)	(NA)
29	PETROLEUM AND COAL PRODUCTS, . .	30	10	1.6	19.3	1.0	2.1	11.0	73.5	251.5	324.0	7.3	1.7	46.0
2952	ASPHALT FELTS AND COATINGS . . . . .	5	4	.3	2.4	.2	.5	1.9	7.3	12.8	20.3	.6	.4	5.5
30	RUBBER AND MISC. PLASTICS PROD .	196	82	7.7	60.3	5.9	11.5	39.9	127.4	87.7	215.0	14.9	(NA)	(NA)
3079	MISCELLANEOUS PLASTICS PRODUCTS, . .	172	69	6.4	50.0	5.0	9.7	32.9	105.7	75.9	181.3	14.1	(NA)	(NA)
32	STONE, CLAY, AND GLASS PRODUCTS . .	348	81	6.9	63.1	5.3	10.7	44.2	126.2	118.8	243.5	9.8	6.9	85.4
327	CONCRETE, GYPSUM, PLASTER PRODUCTS	266	50	3.9	35.8	2.9	5.8	23.2	68.6	67.2	135.7	7.6	FF	(D)
3272	CONCRETE PRODUCTS, NEC . . . . .	110	32	2.1	18.2	1.7	3.6	12.9	33.4	25.7	59.1	3.9	EE	(D)
3281	CUT STONE AND STONE PRODUCTS . . . .	28	15	1.2	11.5	.9	1.9	8.9	21.5	16.5	36.7	.5	EE	(D)
329	MISC. NONMETALLIC MINERAL PRODUCTS	20	5	.5	4.1	.4	.7	2.7	10.8	17.3	27.8	1.1	(NA)	(NA)
33	PRIMARY METAL INDUSTRIES . . . . .	110	54	6.2	57.9	5.0	10.1	43.8	110.8	83.6	191.8	7.5	7.7	83.9
331	BLAST FURNACE, BASIC STEEL PROD. . .	12	5	1.6	15.7	1.2	2.4	11.2	34.0	32.2	65.1	2.6	3.4	32.1
332	IRON AND STEEL FOUNDRIES . . . . .	33	22	2.0	17.8	1.6	3.2	13.7	33.0	16.9	49.1	1.8	1.7	20.6
3321	GRAY IRON FOUNDRIES, . . . . .	27	17	1.3	10.5	1.0	1.9	7.9	19.7	9.7	28.9	1.2	1.0	10.8
336	NONFERROUS FOUNDRIES . . . . .	27	16	1.9	18.5	1.6	3.3	14.9	32.0	20.8	52.3	1.9	2.0	23.7
3361	ALUMINUM FOUNDRIES . . . . .	20	14	1.6	16.7	1.4	2.9	13.8	28.5	18.8	46.7	1.9	1.6	17.7
34	FABRICATED METAL PRODUCTS, . . . .	463	202	32.4	332.1	22.1	43.6	189.6	572.8	507.7	1 071.3	22.8	(NA)	(NA)
341	METAL CANS AND SHIPPING CONTAINERS	10	8	1.4	17.0	1.2	2.8	14.1	59.6	83.2	142.0	2.1	(NA)	(NA)
3411	METAL CANS . . . . .	10	8	1.4	17.0	1.2	2.8	14.1	59.6	83.2	142.0	2.1	1.4	34.8
342	CUTLERY, HANDTOOLS AND HARDWARE, . .	38	14	2.5	21.0	2.0	4.1	14.1	40.9	30.9	68.5	1.0	1.9	20.5
3423	HAND AND EDGE TOOLS, NEC . . . . .	16	8	1.6	14.8	1.4	2.8	10.0	26.1	18.5	42.5	.6	1.2	12.0
343	PLUMBING, HEATING, EXC. ELECTRIC, . .	16	6	.6	6.1	.5	.9	4.0	12.8	13.6	26.6	.5	(NA)	(NA)
344	FABRICATED STRUCTURAL METAL PROD. .	164	66	6.0	58.0	4.3	8.0	36.1	109.0	111.1	217.3	4.6	5.2	71.3
3441	FABRICATED STRUCTURAL METAL PRODUCTS	31	18	2.1	20.4	1.4	2.6	11.7	33.4	47.4	78.9	1.6	1.3	19.9
3442	METAL DOORS, SASH, AND TRIM, . . . .	23	11	.8	7.5	.5	1.0	4.0	12.5	9.8	22.2	.3	.9	10.9
3443	FABRICATED PLATEWORK (BOILER SHOP), .	23	12	1.1	10.9	.8	1.5	7.6	21.1	18.3	38.2	.9	1.1	16.4
3444	SHEET METALWORK, . . . . .	55	14	1.0	9.8	.8	1.5	6.7	20.7	18.1	38.3	1.2	.9	11.6
345	SCREW MACHINE PRODUCTS, BOLTS, ETC	37	21	1.3	12.6	1.1	2.3	9.2	21.7	11.8	32.6	1.1	1.5	20.3
346	METAL FORGINGS AND STAMPINGS . . .	59	37	3.2	27.3	2.4	4.9	18.4	51.2	35.3	85.1	2.9	(NA)	(NA)
347	METAL SERVICES, NEC, . . . . .	63	20	1.4	12.0	1.1	2.1	8.6	19.8	7.3	27.1	.7	1.2	14.9
3471	PLATING AND POLISHING, . . . . .	45	14	.9	8.6	.8	1.4	6.2	13.8	4.5	18.3	.6	.9	11.6
3479	METAL COATING AND ALLIED SERVICES, . .	18	6	.4	3.3	.4	.6	2.4	6.0	2.8	8.8	.1	.3	3.3
348	ORDNANCE AND ACCESSORIES, NEC, . . .	5	5	12.5	144.8	6.8	13.7	62.8	211.8	148.8	361.6	6.5	(NA)	(NA)
349	MISC. FABRICATED METAL PRODUCTS, . .	71	25	3.5	33.5	2.6	5.1	22.2	46.0	65.7	110.5	3.4	(NA)	(NA)
3496	MISC. FABRICATED WIRE PRODUCTS . . .	15	6	1.3	13.2	1.0	1.9	9.8	8.4	33.8	40.3	.4	(NA)	(NA)
3499	FABRICATED METAL PRODUCTS, NEC . . .	44	11	.8	7.1	.6	1.3	4.6	11.2	11.2	23.3	.5	(NA)	(NA)
35	MACHINERY, EXCEPT ELECTRICAL, . . .	860	283	55.3	568.8	33.7	68.4	287.3	1 185.2	932.0	2 062.7	53.2	53.0	912.1
352	FARM AND GARDEN MACHINERY, . . . . .	79	36	4.4	35.8	3.3	6.9	23.7	78.2	100.6	166.4	3.5	(NA)	(NA)
353	CONSTRUCTION AND RELATED MACHINERY	78	38	7.1	67.8	4.9	10.1	44.2	115.7	121.7	237.8	3.2	6.7	97.0
3535	CONVEYORS AND CONVEYING EQUIPMENT, .	14	7	.7	6.6	.4	.9	3.8	11.6	8.1	19.7	.4	.7	8.7
3537	INDUSTRIAL TRUCKS AND TRACTORS . . . .	8	4	.4	4.1	.3	.7	2.9	10.6	8.0	18.0	.2	.3	3.5
354	METALWORKING MACHINERY . . . . .	128	34	3.8	37.7	2.8	5.6	25.3	65.9	34.0	99.1	3.4	3.7	52.4
3541	MACHINE TOOLS, METAL CUTTING TYPES .	10	5	.8	8.9	.6	1.2	5.4	14.1	6.8	20.9	.4	.9	13.9
3542	MACHINE TOOLS, METAL FORMING TYPES .	6	3	.4	3.6	.3	.5	2.4	7.4	3.5	10.9	.2	.6	8.4
3544	SPECIAL DIES, TOOLS, JIGS, FIXTURES	88	17	1.4	14.7	1.1	2.3	11.1	24.4	9.9	33.8	1.7	1.2	17.3
3549	METALWORKING MACHINERY, NEC, . . . .	10	5	.6	7.2	.4	.8	4.0	14.6	6.9	21.0	.5	(NA)	(NA)
3551	FOOD PRODUCTS MACHINERY, . . . . .	22	8	.5	4.7	.3	.6	2.3	9.4	10.6	19.5	.3	88	(D)
3559	SPECIAL INDUSTRY MACHINERY, NEC, . . .	20	21	.9	8.5	.6	1.2	4.6	16.0	10.0	25.3	.9	.5	10.6
356	GENERAL INDUSTRIAL MACHINERY . . . .	81	30	5.0	53.0	3.2	6.4	29.2	118.3	60.2	181.2	3.5	4.0	62.5
3564	BLOWERS AND FANS . . . . .	11	5	.7	6.8	.4	.8	3.8	15.2	8.0	22.7	.2	.5	8.4
3569	GENERAL INDUSTRIAL MACHINERY, NEC, . .	19	8	.6	6.2	.4	.9	3.8	21.8	6.6	29.0	.2	.5	7.3
357	OFFICE AND COMPUTING MACHINES, . . .	43	28	19.6	229.0	8.7	18.1	77.1	483.9	401.9	857.9	22.8	19.1	414.3
358	REFRIGERATION, SERVICE MACHINERY, . .	58	30	7.4	69.3	4.8	9.3	37.9	183.4	137.9	310.4	4.4	6.7	108.6
3581	AUTOMATIC MERCHANDISING MACHINES . .	10	6	1.1	9.1	.7	1.2	5.2	24.8	19.5	41.2	.1	88	(D)
3589	SERVICE INDUSTRY MACHINERY, NEC, . . .	25	8	2.0	20.3	.9	1.8	8.1	48.4	30.3	77.8	1.6	1.6	25.4
359	MISC. MACHINERY, EXCEPT ELECTRICAL	336	63	4.6	41.2	3.8	7.4	29.9	69.3	32.6	100.7	4.0	(NA)	(NA)
36	ELECTRIC, ELECTRONIC EQUIPMENT, . . .	194	91	17.0	144.7	12.2	23.4	88.9	317.2	258.3	567.0	14.7	(NA)	(NA)
361	ELECTRIC DISTRIBUTING EQUIPMENT, . . .	6	4	.4	2.9	.3	.6	1.9	5.5	5.3	10.4	.6	(NA)	(NA)
362	ELECTRICAL INDUSTRIAL APPARATUS, . . .	40	21	4.0	36.6	2.8	5.5	21.7	82.6	60.3	140.0	2.5	4.8	73.0
3621	MOTORS AND GENERATORS, . . . . .	9	8	2.5	25.6	1.9	3.7	16.3	58.2	43.7	99.9	2.0	FF	(D)

See footnotes at end of table.



TABLE 3. General Statistics for the State, by Industry Groups and Industries: 1972 and 1967—Continued

(See appendix, Explanation of Terms)

Code	Industry	1972											1967	
		Establishments		All employees		Production workers			Value added by manufacture	Cost of materials <sup>1</sup>	Value of shipments <sup>1</sup>	Capital expenditures, new	All employees	Value added by manufacture
		Total (number)	With 20 employees or more (number)	Number (1,000)	Payroll (million dollars)	Number (1,000)	Man-hours (million)	Wages (million dollars)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(1,000)	(million dollars)
363	HOUSEHOLD APPLIANCES . . . . .	10	4	3.1	26.2	2.4	4.3	18.1	73.1	88.9	161.0	4.8	FF	(D)
364	ELECT. LIGHTING AND WIRING EQUIP. .	21	8	1.5	13.9	1.1	2.5	9.6	30.8	19.4	51.3	1.0	1.0	15.0
3643	CURRENT-CARRYING WIRING DEVICES. .	9	3	.3	1.7	.2	.4	1.2	3.4	2.1	5.4	.2	(NA)	(NA)
366	COMMUNICATION EQUIPMENT. . . . .	29	15	2.5	18.3	1.7	3.1	9.3	39.2	21.6	52.9	1.4	FF	(D)
367	ELECTRONIC COMPONENTS AND ACCESS .	48	25	3.6	33.3	2.5	4.8	19.2	56.2	31.3	86.3	2.1	4.5	63.6
37	TRANSPORTATION EQUIPMENT . . . . .	149	48	9.9	89.2	8.1	15.6	63.5	227.3	429.3	645.0	(D)	(NA)	(NA)
371	MOTOR VEHICLES AND EQUIPMENT . . . .	62	20	4.5	49.7	3.5	7.2	36.2	147.3	274.0	416.4	(D)	4.0	80.2
3713	TRUCK AND BUS BODIES . . . . .	18	7	.3	3.4	.3	.5	2.1	5.9	7.9	13.8	.3	.4	4.2
373	SHIP, BOAT BUILDING, & REPAIRING .	35	12	2.1	12.8	1.7	3.1	9.4	28.1	28.3	55.6	1.1	1.0	9.5
379	MISC. TRANSPORTATION EQUIPMENT . .	37	11	3.0	23.5	2.5	4.6	16.0	46.0	121.4	161.9	7.4	(NA)	(NA)
38	INSTRUMENTS AND RELATED PRODUCTS	111	40	12.0	111.0	7.6	14.6	57.0	274.0	121.5	394.4	10.5	(NA)	(NA)
3811	ENGINEERING, SCIENTIFIC INSTRUMENTS	8	3	.1	7.2	.4	.9	3.2	12.9	5.8	18.2	.5	1.0	14.3
3842	SURGICAL APPLIANCES AND SUPPLIES . .	22	8	.7	6.2	.5	1.1	3.3	15.5	7.6	20.8	.6	.6	9.2
3851	OPHTHALMIC GOODS . . . . .	14	5	.5	2.8	.4	.9	2.3	7.6	3.6	11.0	.6	.6	10.4
391	JEWELRY, SILVERWARE, PLATED WARE. .	8	2	.4	2.8	.4	.7	2.0	8.4	3.5	11.7	(D)	.7	2.0
3911	JEWELRY, PRECIOUS METAL. . . . .	8	2	.4	2.8	.4	.7	2.0	8.4	3.5	11.7	(D)	CC	(D)
394	TOYS AND SPORTING GOODS. . . . .	75	25	4.0	27.0	3.4	6.4	17.5	46.6	52.7	97.4	4.6	4.5	46.0
3949	SPORTING AND ATHLETIC GOODS, NEC . .	53	16	1.6	9.3	1.4	2.6	6.8	20.4	23.8	43.8	1.8	1.4	13.7
3999	MANUFACTURING INDUSTRIES, NEC. . . .	42	7	1.1	6.2	.9	1.5	4.3	11.4	6.5	17.9	.6	1.0	5.7
--	ADMINISTRATIVE AND AUXILIARY . . .	169	83	25.8	338.0	-	-	-	-	-	-	-	23.9	-

Note: The following symbols indicate employment size range for 1967:

AA less than 250 employees      EE 1,000 to 2,499 employees  
BB 250 to 499 employees      FF 2,500 employees and over  
CC 500 to 999 employees

- Represents zero. (NA) Not available. Because of a revision to this industry or industry group in the 1972 edition of the SIC manual, 1967 census data are not available on a comparable basis. (D) Withheld to avoid disclosing figures for individual companies.

<sup>1</sup>The total cost of materials and value of shipments for industry groups shown may include extensive duplication arising from shipments between establishments in the same industry classification. (For a more complete explanation, see appendix.)

<sup>2</sup>Includes figures for industry groups which have been withheld from publication in order to (a) avoid disclosing figures for individual companies or (b) permit further checking of figures for smaller industry groups. Additional detail will appear in the final report for this State.

## Appendix A. SCOPE AND COVERAGE

This report is one of a series presenting preliminary information, by State, from the 1972 Census of Manufactures. The data will be superseded in a final report which, in turn, will be included in *Volume III, Area Statistics, 1972 Census of Manufactures*. The final report will include a comprehensive discussion of the concepts and definitions used in the census.

The census of manufactures covers each manufacturing establishment in the United States with one paid employee or more; manufacturing establishments with no employees are excluded. Firms which operated more than one establishment were required to file a separate report for each location. Companies which engaged in distinctly different lines of activity at one location were asked to submit separate reports if the company records permitted such a separation and the activities were of significant size.

This report includes figures for administrative offices, warehouses, garages, or other auxiliary units which service manufacturing establishments.

In the 1972 census, the approximately 120,000 manufacturing establishments with fewer than 10 employees were excused from filing reports. Under special arrangements which safeguarded the confidentiality of both tax and census records, data on payrolls, sales, and industry classification from the administrative records of the Social Security Administration and the Internal Revenue Service were made available to the Census Bureau for use in the 1972 Economic Censuses (retail and wholesale trade, service industries, construction industries, manufactures, and mineral industries). Estimates for data other than payrolls and sales for these small establishments were constructed from industry averages. The effect on industry aggregates is slight in most industries. For manufacturing as a whole, these small establishments account for less than 3 percent of the payrolls and value added.

Establishments are classified by industry in accordance with industry definitions described in the 1972 edition of the Standard Industrial Classification (SIC) Manual. For 1972, the SIC was significantly revised and the comparability with prior year's data for some industries was significantly affected. The comparability at the 2- and 3-digit SIC levels was less affected. The final volumes of the 1972 Census of Manufactures will contain a table relating aggregates based on the 1972 SIC with aggregates derived from classifying establishments according to the 1967 SIC definitions.

As in earlier censuses, a number of small establishments may have been misclassified as to industry. However, such possible misclassifications have significant effect on *none* of the statistics except the number of establishments. As indicated above, report forms were not mailed to very small establishments (fewer than 10 employees). The industry classifications for these establishments were assigned on the basis of brief descriptions of the general activity of the establishment. Where the description is incomplete or there are relatively fine lines of demarcation among industries or between manufacturing and nonmanufacturing activity, the code assigned to an establishment could differ from that which would have been assigned on the basis of more complete product information. Therefore, the total establishment count for individual industries should be viewed as an approximation rather than a precise measurement. The counts for establishments with 20 employees or more are more reliable than the total number of establishments.

More detailed figures for this State will appear in the final census reports. Final reports will also include a comprehensive discussion of such concepts as "industry" and "establishment," as well as the various statistical items such as "employment," "value of shipments," and "value added." Similar preliminary and final reports will be issued for other States during the coming months. A series of preliminary summary reports showing U.S. totals for each manufacturing industry and for each State are being issued. Final industry reports and final area reports will be published during 1974.

Order forms describing the individual reports and listing their prices may be obtained from any U.S. Department of Commerce district office or from the Publications Distribution Section, Social and Economic Statistics Administration, Washington, D.C. 20233.

The 1972 Census of Manufactures is the 29th census of manufacturing establishments in the United States. For 1972, it was conducted jointly with the censuses of mineral industries, construction industries, retail trade, wholesale trade, and selected services under authority of Title 13 of the United States Code. Title 13 specifies that a census of manufactures be conducted every 5 years and, as amended, to cover years ending in "2" and "7". Title 13 also authorizes an annual sample survey of manufacturing establishments in interim years.



## Appendix B. EXPLANATION OF TERMS

*(For a more complete discussion of these terms and the method of compiling the Census of Manufactures, see the "Introduction" to the 1967 Census of Manufactures, Volume III).*

**All Employees**—All full-time and part-time employees on the payrolls of operating manufacturing establishments for any part of the pay period ending nearest the 12th of the months specified on the report form. Included are all persons on paid sick leave, paid holidays, and paid vacations during these pay periods. Officers of corporations are included as employees; proprietors and partners of unincorporated firms are excluded. The "all employee" number is the average number of production workers for the midmonth payroll period of March, May, August, and November plus the number of nonproduction employees in mid-March.

**Number of Production Workers**—Workers (up through the working foreman level) engaged in fabricating, processing, assembling, inspecting, receiving, packing, warehousing, shipping (but not delivering), and maintenance, repair, janitorial, and watchman services, product development, auxiliary production for plant's own use (e.g., powerplant), recordkeeping, and other closely associated services. Proprietors and partners are excluded.

**Payroll**—This item includes all forms of compensation such as salaries, wages, commissions, dismissal pay, bonuses, vacation and sick leave pay, and compensation in kind, prior to such deductions as employees' Social Security contributions, withholding taxes, group insurance, union dues, and savings bonds. The total includes salaries of officers of these establishments, if a corporation; it excludes payments to the proprietor or partners, if an unincorporated concern. Respondents were told that in reporting they could follow the definition of payrolls used for calculating the Federal withholding tax.

**Man-Hours of Production Workers**—This total relates to production-worker man-hours worked or paid for at the plant including actual overtime hours (not straight-time equivalent hours). It excludes hours paid for vacation, holidays, or sick leave when the employee was not at the plant.

**Cost of Materials**—The term "Cost of Materials" refers to charges actually paid or payable for items consumed or put into production during the year, including freight and other direct charges incurred by the establishment in acquiring these materials. It includes the cost of materials or fuel consumed regardless of

whether these items were purchased by the establishment from other companies, transferred to it from other establishments of the same company, or withdrawn from inventory during the year. The establishment was requested to value materials transferred from other parts of the company at its approximate market value, not at cost of production. The important components of this cost item are (a) all raw materials, semifinished goods, parts, components, containers, scrap, and supplies put into production or used as operating supplies and for repair and maintenance during the year; (b) electric energy purchased; (c) fuels consumed for heat, power, or the generation of electricity; (d) work done by others on materials or parts furnished by manufacturing establishments (contract work); and (e) products bought and resold in the same condition.

**Value of Shipments**—The value of shipments is the received or receivable net selling value, f.o.b. plant (exclusive of freight and taxes), of all products shipped, both primary and secondary, as well as all miscellaneous receipts such as receipts for contract work performed for others, installation and repair, sales of scrap, and sale of products bought and resold without further processing. Included are all items made by the establishment or for it under contract from materials owned by it whether sold, transferred to other plants of the same company, or shipped on consignment. The net selling value of products made in one plant on a contract basis from materials owned by another was reported by the plant providing the materials.

In the case of multiunit companies, the manufacturer was requested to report the value of products transferred to other establishments of the same company at full economic value; i.e., to include not only the direct costs of production but also a reasonable proportion of "all other costs" (including company overhead) and profit.

**Duplication in Cost of Materials and Value of Products**—The aggregate cost of materials and value-of-shipments figures for industry groups and for all manufacturing industries may include large amounts of duplication since the products of some industries are used as materials by others. With some important exceptions, such as motor vehicles and parts, this duplication is not significant within individual industries but arises from the addition of the totals of related industries in successive stages of the production of a finished manufactured product. Examples are the addition of flour mills to bakeries in the food group and the addition of pulp mills to paper mills in the paper and allied products group of industries. Esti-



mates of this duplication indicate that the value of manufactured products exclusive of such duplication—the value of finished manufactures—approximates two-thirds of the total value of products.

Prior to 1962, the Bureau of the Census did not publish figures for cost of materials or value of shipments if they contained significant duplication. Effective with the 1962 annual survey these figures were shown at all industry levels for the United States to meet the requests for their use in studies in which the presence of an indeterminate amount of duplication is not a limiting factor. However, they are appropriately footnoted. Effective with the 1964 annual survey, these industry group totals are also shown at the State, standard metropolitan statistical area, and large-county level.

Even where there is no significant amount of duplication, value-of-shipments figures are deficient as measures of the relative economic importance of individual manufacturing industries or geographic areas because of the wide variation in ratio of materials, labor, and other processing costs to value of shipments among industries.

**Value Added by Manufacture**—This measure of manufacturing activity is derived by subtracting the cost of materials, supplies, containers, fuel, purchased electricity, and cost of resales contract work from the value of shipments for products manufactured plus resales and receipts for services rendered. The result of this calculation is adjusted by the net change in finished goods and work-in-process inventories between the beginning and end of the year. (In the few industries that report value of production rather than value of shipments, only changes in work-in-process inventories are used to adjust value added. In the shipbuilding and repairing industry, no inventory adjustment is made.)

“Value added” avoids the duplication in the value of shipments figure which results from the use of products of some establishments as materials by others. Value added is considered to be the best value measure available for comparing the relative economic importance of manufacturing among industries and geographic areas.

**Expenditures for Plant and Equipment**—Manufacturing establishments in operation and establishments under construction but not yet in operation, were asked to report their expenditures for (a) permanent additions and major alterations to the manufacturing establishment, and (b) new machinery and equipment used for replacement purposes and additions to plant capacity if they are of the type for which depreciation accounts are ordinarily maintained.

These totals exclude expenditures for new facilities and equipment leased from nonmanufacturing concerns; new facilities owned by the Federal Government but operated under contract by private companies; and plant and equipment furnished to the manufacturer by communities and nonprofit organizations. Expenditures for used plant and equipment (although reported in the census), expenditures for land, and cost of maintenance and repairs charged as current operating expense are also omitted from the figures for new capital expenditures.

**Central Administrative Offices and Auxiliary Units**—In the 1972 census as in previous years, respondents were asked to file separate reports for central administrative offices or auxiliary units which were (1) at different locations from the establishments served or, (2) at the same location as one of these establishments but were not operated as an integral part thereof and served two or more establishments. The functions of employees in central administrative offices include general company policy determination, planning and management (that is, company purchasing, accounting, general engineering, direction of company personnel matters, and legal and patent matters). Auxiliaries are storage facilities, garages, repair shops, purchasing offices, sales promotion offices, and research laboratories serving the plants or central management of the company.

**Standard Metropolitan Statistical Areas**—Standard metropolitan statistical areas (SMSA) are integrated economic and social units with a large volume of daily travel and communication between the central city and outlying parts of the area.<sup>1</sup> Each area (except in New England) consists of one whole county or more. An area may contain not only highly industrialized counties but also adjoining counties which, though primarily residential in character, contribute significantly to the industrial counties' labor force and are socially and economically integrated with the central city. These areas are defined by the Federal Committee on Standard Metropolitan Statistical Areas of the Office of Management and Budget for general-purpose use throughout the Federal Government in presenting economic and social data. In the New England States, similar intergration criteria are applied in defining

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<sup>1</sup> Each standard metropolitan statistical area must include either (1) a city with 50,000 or more inhabitants, or (2) a city having a population of at least 25,000 which (a) with the addition of the population of contiguous places has a population density of at least 1,000 persons per square mile; (b) constitutes, for general economic and social purposes, a single community with a combined population of at least 50,000; and (c) includes a total population of at least 75,000 in the county or counties in which the city and contiguous places are located.



SMSA's on a city and town basis because towns rather than counties are regarded as the significant unit in this region of the country.

The requirement that each SMSA consist of county units (except in New England) sometimes results in the inclusion in an area of considerable amount of territory which would not ordinarily be considered "metropolitan," much less "industrial." It is recognized that metropolitan areas could be more accurately defined in terms of smaller area segments such as minor civil

divisions, but the usefulness of areas so defined would be limited by the fact that many types of economic and social data are available only on a county basis.

Each SMSA is designated by the name of the principal city of the area. In addition to the name of the principal city, the area title may include one or two additional city names.

The data for SMSA's which changed definition since the 1967 census have not been retabulated on the new basis for years prior to 1972.



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## PRELIMINARY REPORT

# 1972 CENSUS OF MANUFACTURES

## AREA SERIES

### Mississippi

Value added by manufacturing in 1972 in the State of Mississippi amounted to \$2,772 million, a 24-percent increase from 1971 and a 69-percent increase from 1967.

This report presents preliminary results from the 1972 Census of Manufactures for the State, its Standard Metropolitan Statistical Areas, and its counties.

Data are provided for industry groups within the State. Historical data, back to 1958, are included for the State as a whole

and 1967 figures on employment and value added are provided for the smaller areas.

The figures in this report have been subjected to only preliminary review and must be regarded as approximations of the final census figures. No adjustments have been made in the value figures for changes in price level.

For an explanation of the terms used in the tables, see the appendix at the end of this report.

TABLE 1. General Statistics for the State: 1972 and Earlier Years

(See appendix, Explanation of Terms)

Year	Establishments		All employees <sup>1</sup>		Production workers			Value added by manufacture	Cost of materials <sup>2</sup>	Value of shipments <sup>2</sup>	Capital expenditures, new
	Total	With 20 employees or more	Number	Payroll	Number	Man-hours	Wages				
	(number)	(number)	(1,000)	(million dollars)	(1,000)	(millions)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(million dollars)
MISSISSIPPI											
1972 Census .....	2,680	1,027	197.6	1,299.4	163.2	326.0	944.1	2,771.6	3,720.7	6,445.2	230.4
1971 ASM .....	(NA)	(NA)	181.7	1,070.2	150.2	296.4	787.8	2,237.2	3,053.9	5,272.2	189.0
1970 ASM .....	(NA)	(NA)	178.8	990.5	147.6	290.7	718.5	2,102.9	2,766.0	4,836.5	274.7
1969 ASM .....	(NA)	(NA)	174.9	929.1	144.1	285.1	679.4	1,912.0	2,556.9	4,465.0	185.4
1968 ASM .....	(NA)	(NA)	169.2	866.4	140.2	282.0	639.0	1,846.9	2,343.8	4,180.1	143.7
1967 Census .....	2,761	925	160.4	764.0	133.8	269.7	560.9	1,635.3	2,111.8	3,719.3	276.2
1966 ASM .....	(NA)	(NA)	157.8	684.8	133.6	271.3	513.3	1,488.5	1,999.2	3,447.8	187.6
1965 ASM .....	(NA)	(NA)	147.1	601.8	124.5	249.8	455.5	1,206.1	1,826.9	3,015.0	117.5
1964 ASM .....	(NA)	(NA)	133.5	533.7	111.6	225.8	400.4	1,111.6	1,621.0	2,718.9	103.7
1963 Census .....	2,384	848	128.5	486.2	108.5	214.5	367.9	1,017.0	(NA)	(NA)	131.2
1962 ASM .....	(NA)	(NA)	119.6	428.0	100.8	197.2	321.1	848.9	(NA)	(NA)	109.1
1961 ASM .....	(NA)	(NA)	111.5	378.3	92.9	181.1	279.4	759.5	(NA)	(NA)	39.3
1960 ASM .....	(NA)	(NA)	108.9	358.2	91.2	175.4	269.0	697.4	(NA)	(NA)	40.9
1959 ASM .....	(NA)	(NA)	111.1	365.7	93.8	184.3	278.8	706.2	(NA)	(NA)	63.9
1958 Census .....	2,433	743	108.5	354.4	92.5	178.7	280.8	642.2	(NA)	(NA)	67.7

Note: "ASM" data are based on a representative sample of manufacturing establishments canvassed in the Annual Survey of Manufactures. These estimates may differ from the results of a complete canvass of all manufacturing establishments. The standard errors associated with these estimates are published in the annual survey of manufactures volumes for this period. For comparative purposes, the 1972 ASM estimate for the State of Mississippi was 198 thousand employees, and \$2,763 million in value added with corresponding standard error of estimate of 1 and 1.

(NA) Not available.

<sup>1</sup>Includes employment and payroll at central administrative offices and auxiliary units. (For a definition of these units, see appendix.)

<sup>2</sup>The total cost of materials and value of shipments may include extensive duplication arising from shipments between establishments in the same industry classification. (For a more complete explanation, see appendix.)

TABLE 2. General Statistics for the State, Standard Metropolitan Statistical Areas, and Counties: 1972 and 1967

(See appendix, Explanation of Terms)

State, standard metropolitan statistical areas, and counties <sup>1</sup>	1972										1967		
	Establishments		All employees <sup>2</sup>		Production workers			Value added by manufac- ture	Cost of materials <sup>3</sup>	Value of shipments <sup>3</sup>	Capital expendi- tures, new	All employees	Value added by manufac- ture
	Total	With 20 employees or more	Number	Payroll	Number	Man-hours	Wages						
	(number)	(number)	(1,000)	(million dollars)	(1,000)	(million)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(1,000)	(million dollars)
MISSISSIPPI, TOTAL . . . . .	2 680	1 027	197.6	1 299.4	163.2	326.0	944.1	2 771.6	3 720.7	6 445.2	230.4	160.4	1 635.3
STANDARD METROPOLITAN STATISTICAL AREAS <sup>1</sup>													
BILOXI-GULFPORT. . . . .	171	56	5.8	38.5	4.2	8.3	24.4	79.7	82.2	160.2	12.0	(D)	(D)
JACKSON. . . . .	299	116	15.4	103.7	12.0	24.7	69.0	233.8	287.5	517.6	19.5	13.8	172.9
MEMPHIS. . . . .	1 036	451	64.2	525.7	46.6	95.0	341.0	1 246.4	1 843.2	3 159.7	82.5	59.8	821.0
PORTION IN TENNESSEE. . . . .	954	411	59.8	495.4	43.4	88.6	322.3	1 271.4	1 765.7	3 016.5	74.6	56.9	791.2
PORTION IN MISSISSIPPI. . . . .	36	19	2.4	16.5	1.8	3.6	10.3	37.3	42.0	76.5	2.6	1.6	17.0
PORTION IN ARKANSAS. . . . .	46	21	2.0	13.8	1.4	2.8	8.4	37.7	35.5	66.7	5.3	1.3	12.8
COUNTIES													
ADAMS. . . . .	41	16	3.9	36.9	3.2	6.4	29.9	78.3	87.9	165.2	4.8	4.3	57.2
ALCORN. . . . .	50	21	5.2	33.8	4.3	8.7	24.5	67.9	67.0	131.7	3.7	3.7	32.7
AMITE. . . . .	31	3	.9	5.4	.8	1.7	4.7	15.3	14.6	29.3	1.9	.8	5.5
ATTALA. . . . .	30	14	2.0	12.7	1.7	3.4	10.1	31.2	42.3	68.2	1.5	1.4	14.3
BOLIVAR. . . . .	23	9	2.3	14.6	2.0	4.1	12.0	29.9	30.9	63.0	1.7	2.2	24.9
CARROLL. . . . .	11	3	.3	1.4	.2	.5	1.0	2.2	2.3	4.4	.1	.1	.6
CHICKASAW. . . . .	41	22	3.7	20.5	3.1	6.2	16.5	44.6	47.0	91.6	1.6	2.8	23.9
CHOCTAW. . . . .	14	6	.8	4.1	.8	1.5	3.2	10.0	6.7	16.3	.9	.7	4.5
CLAIBORNE. . . . .	21	4	.5	3.3	.4	1.0	2.5	7.3	10.0	16.9	1.6	.6	4.1
CLARKE. . . . .	40	9	1.8	9.6	1.6	3.1	7.8	22.4	21.1	43.5	1.9	1.5	9.3
CLAY. . . . .	22	12	3.8	26.9	3.0	5.8	20.4	77.3	147.3	223.5	2.3	2.3	38.7
COAHOMA. . . . .	30	14	1.5	10.5	1.2	2.3	6.9	30.2	48.4	78.5	1.1	1.5	20.3
COPIAH. . . . .	32	13	2.2	10.7	1.9	3.9	8.2	23.3	31.4	54.9	.8	2.6	17.3
COVINGTON. . . . .	10	4	1.0	4.9	.9	2.1	4.3	11.6	19.9	31.2	.2	.8	4.3
DE SOTO. . . . .	36	19	2.4	16.5	1.8	3.6	10.3	37.3	42.0	76.5	2.6	1.6	17.0
FORREST. . . . .	71	26	4.1	26.6	3.1	6.1	16.8	63.8	80.7	143.3	3.4	3.5	41.7
FRANKLIN. . . . .	25	4	.4	1.8	.4	.7	1.5	4.0	3.9	7.8	.3	.2	1.4
GRENADA. . . . .	26	15	3.8	23.7	3.2	6.7	18.6	50.9	76.3	126.3	1.8	3.2	31.7
HANCOCK. . . . .	15	7	.6	5.2	.2	.3	1.1	3.3	2.9	6.2	(Z)	(D)	(D)
HARRISON. . . . .	123	42	4.3	27.9	3.2	6.2	19.0	63.5	63.6	125.5	11.1	3.2	42.7
HINDS. . . . .	235	87	12.6	84.0	9.6	19.6	53.8	175.5	237.2	408.6	15.7	12.2	154.8
HOLMES. . . . .	26	9	1.4	5.9	1.3	2.5	4.8	14.0	10.8	25.2	.7	.7	5.4
HUMPHREYS. . . . .	11	3	.4	2.3	.4	.8	2.0	4.4	6.2	10.6	.3	.5	4.0
ITAWAMBA. . . . .	24	14	2.3	12.5	2.1	4.2	10.7	32.4	46.7	76.5	1.4	2.0	12.0
JACKSON. . . . .	60	26	22.7	230.7	18.5	35.3	160.8	353.2	752.9	1 117.1	47.2	13.3	169.9
JASPER. . . . .	21	2	.8	3.9	.7	1.3	3.2	8.3	4.5	12.5	.4	.8	6.0
JEFFERSON. . . . .	10	4	.4	1.7	.3	.6	1.5	3.0	3.9	6.3	1.1	.2	1.1
JEFFERSON DAVIS. . . . .	9	2	.4	1.3	.4	.7	1.2	2.9	3.0	5.9	.1	.6	2.1
JONES. . . . .	66	26	4.7	34.4	3.7	7.5	23.8	63.6	85.8	148.8	(D)	3.8	41.8
KEMPER. . . . .	19	3	.3	1.5	.2	.5	1.2	2.8	3.4	5.8	.3	.2	2.2
LAFAYETTE. . . . .	12	5	1.0	5.5	.9	1.7	4.3	18.7	9.1	27.4	2.2	.6	3.6
LAMAR. . . . .	26	10	1.2	6.6	1.1	2.1	5.6	14.0	49.0	63.2	2.2	.9	12.6
LAUDERDALE. . . . .	104	38	4.7	27.9	3.6	7.5	19.1	56.4	73.2	128.2	3.8	4.0	36.5
LAWRENCE. . . . .	17	3	1.2	9.8	1.1	2.1	7.8	35.0	41.9	77.5	.5	(D)	(D)
LEAKE. . . . .	25	7	1.2	5.2	1.1	2.2	4.3	11.0	21.3	32.0	.7	.7	3.9
LEE. . . . .	97	53	9.7	60.5	7.8	15.8	44.5	123.8	187.5	308.2	8.5	7.8	68.8
LEFLORE. . . . .	29	15	2.5	13.8	2.1	4.5	10.4	28.2	37.1	66.3	1.6	2.6	23.4
LINCOLN. . . . .	44	12	2.0	11.6	1.6	3.2	8.0	24.8	40.4	64.0	1.4	1.7	16.9
LOWNDES. . . . .	49	30	5.8	36.9	4.7	9.6	26.4	94.9	106.1	198.8	6.2	5.3	58.3
MADISON. . . . .	41	18	2.7	14.9	2.1	4.2	10.9	30.9	40.1	71.7	1.4	3.2	22.7
MARION. . . . .	40	11	3.7	29.3	2.0	3.1	7.2	19.4	22.5	41.5	3.9	1.9	11.1
MARSHALL. . . . .	22	11	2.5	14.3	2.1	4.0	10.1	24.0	22.8	44.0	2.7	1.5	11.6
MONROE. . . . .	51	30	6.2	32.3	5.5	10.4	25.5	83.0	107.7	187.7	3.8	5.3	52.3
MONTGOMERY. . . . .	24	8	1.2	6.2	.9	1.9	4.5	11.5	7.3	18.5	.7	1.2	9.0
NESHOBA. . . . .	33	9	2.6	15.0	2.3	4.9	12.6	38.7	41.2	79.1	2.3	1.9	16.3
NEWTON. . . . .	23	13	2.3	11.4	1.9	3.8	9.3	23.6	16.3	39.8	.6	2.2	11.3
NOXUBEE. . . . .	17	8	1.0	4.3	.9	1.6	3.5	9.4	9.4	19.0	.8	.8	4.6
OKTIBBEHA. . . . .	40	13	1.7	10.1	1.4	3.0	7.1	20.2	28.0	43.1	2.4	.8	13.1
PANOLA. . . . .	27	14	1.7	8.1	1.5	2.9	6.0	17.5	16.0	34.6	1.0	1.8	13.8
PEARL RIVER. . . . .	34	10	1.7	8.8	1.5	2.8	7.0	11.6	20.2	31.7	.8	1.3	7.1
PERRY. . . . .	21	3	.6	3.1	.5	1.1	2.7	6.4	7.3	14.0	(D)	.5	2.6
PIKE. . . . .	51	22	2.5	17.4	3.0	5.1	13.5	42.1	52.9	76.2	1.8	3.0	22.1
PONTOTOC. . . . .	20	12	2.6	14.8	2.2	4.4	11.2	29.2	23.5	51.9	1.4	1.1	6.3
PRENTISS. . . . .	11	10	2.7	12.6	2.6	4.9	11.3	32.1	21.0	44.0	1.3	2.1	15.0
QUITMAN. . . . .	5	3	.5	2.8	.4	.9	2.2	7.8	10.2	18.2	.4	(D)	(D)
RANKIN. . . . .	44	29	2.8	19.7	2.4	5.1	15.2	58.3	50.3	109.0	3.8	1.6	18.0
SCOTT. . . . .	33	17	3.1	14.3	2.8	5.9	12.5	42.9	83.0	129.8	1.2	2.6	30.5
SHARKEY. . . . .	8	3	.3	1.4	.3	.5	1.2	2.3	2.5	4.5	.2	(D)	(D)
SMITH. . . . .	36	10	1.6	9.1	1.5	3.1	7.5	30.4	21.6	51.8	(D)	.7	3.7
STONE. . . . .	33	7	.9	5.4	.8	1.8	4.3	12.9	15.7	28.5	1.0	.6	4.2
SUNFLOWER. . . . .	19	10	1.6	9.0	1.2	2.3	5.7	34.6	47.8	73.3	13.9	1.2	9.1
TALLAHATCHIE. . . . .	11	4	.3	1.1	.4	.8	1.8	3.1	1.5	3.1	.4	.3	1.4
TATE. . . . .	11	6	1.7	10.2	1.4	2.8	7.0	21.4	25.3	46.1	1.4	(D)	(D)
TIPPAH. . . . .	25	5	1.7	9.4	1.6	3.0	8.1	12.6	13.8	26.4	.2	1.6	11.3
TISHOMINGO. . . . .	6	11	.4	1.1	.4	.8	1.1	3.1	31.9	40.6	.5	2.1	12.9
UNION. . . . .	27	18	3.1	19.8	2.5	5.2	14.4	42.7	43.0	85.6	4.3	1.9	14.3
WALTHALL. . . . .	12	3	.6	2.9	.5	.9	2.5	4.0	1.5	5.5	.2	.5	2.3
WARREN. . . . .	49	22	4.5	36.0	3.5	7.4	27.4	97.0	123.9	220.7	4.0	4.5	53.0
WASHINGTON. . . . .	76	35	5.2	35.4	4.3	9.5	26.6	74.9	91.4	167.6	4.1	4.1	48.4
WAYNE. . . . .	34	7	1.4	7.0	1.3	2.5	5.8	30.4	21.1	51.0	1.6	1.1	5.8

See footnotes at end of table.



TABLE 2. General Statistics for the State, Standard Metropolitan Statistical Areas, and Counties: 1972 and 1967—Continued

(See appendix, Explanation of Terms)

State, standard metropolitan statistical areas, and counties¹	1972											1967	
	Establishments		All employees²		Production workers			Value added by manufac- ture	Cost of materials³	Value of shipments³	Capital expendi- tures, new	All employees	Value added by manufac- ture
	Total	With 20 employees or more	Number	Payroll	Number	Man-hours	Wages						
	(number)	(number)	(1,000)	(million dollars)	(1,000)	(million)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(1,000)	(million dollars)
COUNTIES-CONTINUED													
WEBSTER, . . . . .	15	4	1.0	5.0	0.9	1.9	4.5	8.4	7.7	15.7	1.1	0.7	4.9
WILKINSON, . . . . .	20	4	.7	3.6	.6	1.4	2.9	9.2	9.1	18.6	.4	.3	2.9
WINSTON, . . . . .	28	7	2.5	15.9	2.1	4.5	12.0	45.0	36.9	77.2	2.7	1.6	18.0
YALOBUSHA, . . . . .	10	5	1.5	6.7	1.3	2.7	5.6	12.7	24.2	36.6	.3	.9	4.4
YAZOO, . . . . .	23	11	1.6	11.4	1.0	2.1	6.2	56.8	32.3	78.9	2.8	2.1	65.2

(D) Withheld to avoid disclosing figures for individual companies. (Z) Less than half of the unit of measurement shown.

<sup>1</sup>Some counties were withheld from publication in order to (a) avoid disclosing figures for individual companies or (b) permit further checking of the figures for smaller counties. Additional detail will appear in the final report for this State.<sup>2</sup>Includes employment and payroll at central administrative offices and auxiliary units. (For a definition of these units, see appendix.)<sup>3</sup>The total cost of materials and value of shipments may include extensive duplication arising from shipments between establishments in the same industry classification (For a more complete explanation, see appendix.)<sup>4</sup>The standard metropolitan statistical areas in this State are defined as follows:

BILLOXI-GULFPORT SMSA: Consists of Hancock, Harrison, and Stone Counties, MS.

JACKSON SMSA: Consists of Hinds and Rankin Counties, MS.

MEMPHIS, TN-AR-MS, SMSA: Consists of Shelby and Tipton Counties, TN; Crittenden County, AR; and DeSoto County, MS.

TABLE 3. General Statistics for the State, by Industry Groups and Industries: 1972 and 1967

(See appendix, Explanation of Terms)

Code	Industry	1972											1967	
		Establishments		All employees		Production workers			Value added by manufacture	Cost of materials <sup>1</sup>	Value of shipments <sup>1</sup>	Capital expenditures, new	All employees	Value added by manufacture
		Total	With 20 employees or more	Number	Payroll	Number	Man-hours	Wages						
		(number)	(number)	(1,000)	(million dollars)	(1,000)	(million)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(1,000)	(million dollars)	
	ALL INDUSTRIES, TOTAL <sup>2</sup> . . . . .	2 680	1 027	197.6	1 299.4	163.2	326.0	944.1	2 771.6	3 720.7	6 445.2	230.4	160.4	1 635.3
20	FOOD AND KINDRED PRODUCTS. . . . .	304	151	17.0	101.8	12.1	25.4	62.6	224.1	725.4	952.2	18.0	14.6	156.6
201	MEAT PRODUCTS. . . . .	64	29	8.9	49.2	7.5	15.6	37.4	96.9	377.3	473.7	4.9	6.0	46.3
2011	MEATPACKING PLANTS . . . . .	36	10	3.5	23.6	2.6	5.4	16.3	43.6	217.8	261.1	3.0	2.5	27.1
2016	POULTRY DRESSING PLANTS. . . . .	19	17	5.3	24.5	4.8	9.3	20.3	49.5	151.3	200.7	1.6	(NA)	(NA)
202	DAIRY PRODUCTS . . . . .	36	23	1.7	11.4	.7	1.5	4.0	21.8	65.3	87.7	2.1	1.8	27.1
2026	FLUID MILK . . . . .	21	16	1.3	8.8	.5	1.1	2.7	16.8	48.4	65.1	1.6	1.3	17.1
203	PRESERVED FRUITS AND VEGETABLES. . .	8	2	.3	1.5	.2	.5	1.0	2.4	4.7	7.1	.3	(NA)	(NA)
204	GRAIN MILL PRODUCTS. . . . .	39	15	1.0	6.7	.7	1.7	4.7	20.1	88.4	108.7	1.6	1.1	19.7
2048	PREPARED FEEDS, NEC. . . . .	33	11	.6	4.3	.4	1.1	2.9	11.0	65.0	76.2	.7	(NA)	(NA)
205	BAKERY PRODUCTS. . . . .	25	13	1.4	10.3	.7	1.5	4.5	25.2	24.5	49.7	1.0	1.3	19.2
2051	BREAD, CAKE, AND RELATED PRODUCTS. .	25	13	1.4	10.3	.7	1.5	4.5	25.2	24.5	49.7	1.0	EE	(D)
207	FATS AND OILS. . . . .	30	24	1.3	7.9	1.1	2.6	6.0	23.1	124.0	149.8	4.8	(NA)	(NA)
2074	COTTONSEED OIL MILLS . . . . .	17	16	.8	4.7	.7	1.6	3.5	6.6	54.5	63.9	2.5	.7	6.3
208	BEVERAGES. . . . .	60	37	2.1	14.0	.8	1.6	4.0	32.2	36.4	68.3	3.2	2.1	22.8
2086	BOTTLED AND CANNED SOFT DRINKS . . .	56	37	2.1	13.8	.8	1.6	3.9	31.8	36.1	67.6	3.2	EE	(D)
209	MISC. FOODS AND KINDRED PRODUCTS . .	46	9	.5	2.0	.4	.5	1.3	5.4	8.8	14.2	.3	(NA)	(NA)
22	TEXTILE MILL PRODUCTS. . . . .	34	25	7.4	41.2	6.6	13.2	34.2	79.8	96.8	174.2	6.6	6.5	57.3
225	KNITTING MILLS . . . . .	17	14	4.2	19.3	3.8	7.2	16.9	30.1	29.3	58.9	1.5	4.0	22.1
2251	WOMEN'S HOSIERY, EXCEPT SOCKS. . . .	9	7	2.2	10.0	2.0	3.8	9.0	11.6	12.5	24.1	.3	EE	(D)
2254	KNIT UNDERWEAR MILLS . . . . .	4	4	1.1	4.9	1.0	1.8	4.2	8.4	5.8	13.8	.2	1.7	8.1
23	APPAREL, OTHER TEXTILE PRODUCTS. . . .	188	165	39.3	164.3	35.8	67.1	139.2	285.6	292.4	566.8	10.2	35.6	174.7
232	MEN'S AND BOYS' FURNISHINGS. . . . .	103	98	24.8	102.5	23.2	43.3	88.9	176.8	207.3	374.2	5.7	26.6	119.3
2321	MEN'S AND BOYS' SHIRTS AND NIGHTWEAR	27	27	6.3	24.7	5.7	10.5	20.9	41.2	26.1	65.5	1.7	7.7	31.4
2328	MEN'S AND BOYS' WORK CLOTHING. . . .	27	27	6.6	26.4	6.3	12.1	24.1	43.6	42.2	86.2	1.2	7.3	32.1
233	WOMEN'S, AND MISSES' OUTERWEAR . . .	19	16	3.1	12.4	2.8	5.1	10.2	16.6	4.8	21.3	.6	1.4	6.5
2335	WOMEN'S AND MISSES' DRESSES. . . . .	6	4	.5	2.2	.5	.8	1.8	3.0	.5	3.6	(D)	98	(D)
2339	WOMEN'S, MISSES' OUTERWEAR, NEC. . .	10	9	1.5	6.1	1.4	2.6	5.0	9.1	13.4	22.5	.2	.5	2.4
238	MISC. APPAREL AND ACCESSORIES. . . . .	14	13	2.3	9.1	2.0	3.9	7.5	20.7	14.2	34.4	.2	2.1	17.1
239	MISC. FABRICATED TEXTILE PRODUCTS. .	27	15	2.3	10.3	1.9	3.4	7.5	19.0	29.7	48.5	.6	1.7	11.8
2392	HOUSEFURNISHINGS, NEC. . . . .	8	6	1.0	5.0	.9	1.7	3.9	10.4	19.3	27.9	.4	.4	3.2
24	LUMBER AND WOOD PRODUCTS . . . . .	927	183	22.0	131.6	19.1	39.8	104.5	309.2	382.3	690.4	45.5	(NA)	(NA)
2411	LOGGING CAMPS, LOGGING CONTRACTORS .	517	15	2.1	9.9	1.9	3.4	8.4	25.7	30.8	56.2	2.6	1.5	11.9
242	SAWMILLS AND PLANING MILLS . . . . .	259	90	8.0	44.2	7.2	15.0	37.1	90.6	127.3	219.6	10.8	8.7	55.6
2421	SAWMILLS AND PLANING MILLS, GENERAL. .	231	76	5.5	31.7	5.0	10.6	26.5	70.6	105.0	176.6	9.8	6.3	42.4
243	MILLWORK, PLYWOOD, STRUC. MEMBERS. .	63	27	3.1	19.9	2.8	6.2	16.3	54.1	60.0	114.2	6.0	(NA)	(NA)
2431	MILLWORK . . . . .	26	8	.5	3.1	.5	.3	2.2	5.5	15.3	20.8	.2	(NA)	(NA)
244	WOOD CONTAINERS. . . . .	14	11	1.6	7.9	1.4	2.9	6.5	15.3	11.2	26.8	.2	(NA)	(NA)
2449	WOOD CONTAINERS, NEC . . . . .	5	4	.8	4.2	.7	1.5	3.3	7.9	7.2	15.2	.1	(NA)	(NA)
245	WOOD BUILDINGS AND MOBILE HOMES. . .	16	10	1.5	8.9	1.1	2.1	6.2	17.1	35.2	51.9	.9	(NA)	(NA)
249	MISCELLANEOUS WOOD PRODUCTS. . . . .	64	30	5.8	40.8	4.7	10.1	29.9	82.3	91.9	171.7	21.8	(NA)	(NA)

See footnotes at end of table.

TABLE 3. General Statistics for the State, by Industry Groups and Industries: 1972 and 1967—Continued

(See appendix, Explanation of Terms)

Code	Industry	1972											1967	
		Establishments		All employees		Production workers			Value added by manufacture	Cost of materials <sup>1</sup>	Value of shipments <sup>1</sup>	Capital expenditures, new	All employees	Value added by manufacture
		Total	With 20 employees or more	Number	Payroll	Number	Man-hours	Wages						
		(number)	(number)	(1,000)	(million dollars)	(1,000)	(million)	(million dollars)					(million dollars)	(million dollars)
25	FURNITURE AND FIXTURES . . . . .	108	60	14.9	88.3	12.9	25.8	68.1	182.9	183.6	361.7	12.7	10.8	90.9
251	HOUSEHOLD FURNITURE. . . . .	92	53	14.3	84.0	12.3	24.6	65.0	175.2	174.2	345.1	12.4	(NA)	(NA)
2511	WOOD HOUSEHOLD FURNITURE . . . . .	30	12	4.3	22.4	3.7	6.9	16.8	45.5	35.6	78.5	4.5	(NA)	(NA)
2512	UPHOLSTERED HOUSEHOLD FURNITURE. . . . .	43	34	8.2	50.8	7.3	14.9	41.1	106.9	107.8	213.8	6.8	(NA)	(NA)
26	PAPER AND ALLIED PRODUCTS. . . . .	39	28	6.7	62.5	5.7	11.5	49.6	170.0	180.0	351.2	6.4	5.6	74.0
265	PAPERBOARD CONTAINERS AND BOXES. . . . .	18	15	1.5	12.0	1.3	2.6	8.4	23.1	34.0	57.0	1.0	1.0	9.8
27	PRINTING AND PUBLISHING. . . . .	235	35	3.2	19.4	1.9	3.6	10.5	41.2	16.3	57.4	4.1	2.5	24.8
2711	NEWSPAPERS . . . . .	103	22	2.1	12.7	1.2	2.0	6.0	28.6	8.5	37.0	3.0	1.6	16.7
275	COMMERCIAL PRINTING. . . . .	112	10	.8	5.3	.6	1.1	3.6	9.2	6.7	15.8	1.0	(NA)	(NA)
28	CHEMICALS AND ALLIED PRODUCTS. . . . .	77	28	5.3	44.7	3.8	8.0	30.9	222.1	200.3	423.2	15.8	5.2	157.5
287	AGRICULTURAL CHEMICALS . . . . .	24	12	1.5	14.8	1.0	2.4	9.9	92.0	79.5	169.6	(D)	(NA)	(NA)
29	PETROLEUM AND COAL PRODUCTS. . . . .	19	10	1.3	14.1	.9	2.2	9.2	83.4	348.5	435.8	21.9	CC	(D)
30	RUBBER AND MISC. PLASTICS PROD. . . . .	48	33	6.3	48.3	5.0	10.0	35.3	92.9	123.9	216.9	13.1	(NA)	(NA)
3079	MISCELLANEOUS PLASTICS PRODUCTS. . . . .	31	21	2.5	16.4	1.9	4.0	11.2	30.6	43.7	75.5	10.2	(NA)	(NA)
32	STONE, CLAY, AND GLASS PRODUCTS. . . . .	165	69	6.7	49.1	5.4	11.2	35.8	114.4	98.9	212.4	10.8	4.9	59.1
322	GLASS, GLASSWARE, PRESSED OR BLOWN	4	4	.8	7.2	.7	1.5	5.8	14.8	7.7	22.1	.6	CC	(D)
325	STRUCTURAL CLAY PRODUCTS . . . . .	22	19	1.5	9.8	1.3	2.8	6.8	19.0	17.7	36.9	3.4	1.5	11.2
3251	BRICK AND STRUCTURAL CLAY TILE . . . . .	17	15	1.0	6.2	.8	1.8	4.2	13.7	13.1	26.8	3.3	.9	7.3
327	CONCRETE, GYPSUM, PLASTER PRODUCTS	115	32	2.2	14.4	1.6	3.2	9.3	37.1	35.1	71.5	4.2	1.7	22.3
3272	CONCRETE PRODUCTS, NEC . . . . .	34	14	.9	5.5	.7	1.6	4.3	15.3	9.0	23.8	.9	.6	8.9
3273	READY-MIXED CONCRETE . . . . .	67	16	1.1	7.9	.8	1.4	4.3	18.8	23.6	42.3	2.8	1.0	12.2
329	MISC. NONMETALLIC MINERAL PRODUCTS	10	7	1.3	11.0	1.0	2.1	8.8	27.3	22.7	49.6	1.4	(NA)	(NA)
33	PRIMARY METAL INDUSTRIES . . . . .	23	19	2.4	16.5	2.1	4.4	13.0	41.9	78.4	117.3	3.7	1.2	15.8
331	BLAST FURNACE, BASIC STEEL PROD. . . . .	5	4	.4	3.3	.4	.7	2.4	7.7	14.0	21.5	.5	.2	3.9
335	NONFERROUS ROLLING AND DRAWING . . . . .	9	9	1.4	9.6	1.2	2.7	7.7	30.2	55.1	81.9	2.3	.7	8.2
3357	NONFERROUS WIRE DRAWING, INSULATING. . . . .	3	3	.3	2.0	.3	.6	1.6	4.6	4.4	8.5	.7	AA	(D)
34	FABRICATED METAL PRODUCTS. . . . .	131	73	9.8	67.3	8.2	16.6	51.9	188.7	180.3	364.0	5.2	(NA)	(NA)
341	METAL CANS AND SHIPPING CONTAINERS	6	2	.3	2.5	.3	.6	2.2	9.5	16.3	25.5	.3	(NA)	(NA)
342	CUTLERY, HANDTOOLS AND HARDWARE. . . . .	8	6	.9	5.8	.7	1.4	4.3	16.7	14.1	31.3	.3	1.1	12.2
344	FABRICATED STRUCTURAL METAL PROD. . . . .	75	37	4.4	31.2	3.8	7.8	24.8	101.2	85.7	182.9	2.1	3.5	56.1
3443	FABRICATED PLATEWORK (BOILER SHOP). . . . .	8	7	1.7	13.2	1.5	2.9	11.2	47.5	24.3	70.2	.5	1.5	30.7
3444	SHEET METALWORK. . . . .	23	5	.3	2.3	.2	.4	1.3	3.9	4.8	9.4	.1	(NA)	(NA)
346	METAL FORGINGS AND STAMPINGS . . . . .	13	11	2.3	14.9	1.8	3.7	11.1	35.8	38.0	73.4	.6	(NA)	(NA)
3460	METAL STAMPINGS, NEC . . . . .	6	4	.4	2.6	.3	.6	2.0	5.6	6.2	12.0	.2	(NA)	(NA)
349	MISC. FABRICATED METAL PRODUCTS. . . . .	16	10	1.3	9.2	1.1	2.1	6.8	18.6	21.0	39.0	1.2	(NA)	(NA)
35	MACHINERY, EXCEPT ELECTRICAL . . . . .	162	45	8.9	65.6	6.9	14.0	44.7	160.3	167.9	310.9	24.7	7.5	108.2
352	FARM AND GARDEN MACHINERY. . . . .	22	15	2.7	15.4	2.1	4.0	10.1	51.0	76.4	116.6	12.3	(NA)	(NA)
3523	FARM MACHINERY AND EQUIPMENT . . . . .	18	11	1.4	8.2	1.2	2.1	5.3	35.2	41.6	67.6	(D)	(NA)	(NA)
3524	LAWN AND GARDEN EQUIPMENT. . . . .	4	4	1.2	7.3	1.0	1.9	4.8	15.9	34.8	49.0	(D)	(NA)	(NA)
353	CONSTRUCTION AND RELATED MACHINERY	15	■	2.0	15.5	1.3	2.7	9.3	27.5	30.0	56.2	8.2	2.2	26.2
354	METALWORKING MACHINERY . . . . .	17	3	.3	2.4	.2	.4	1.7	4.4	2.3	6.6	.3	(NA)	(NA)
356	GENERAL INDUSTRIAL MACHINERY . . . . .	12	4	1.3	10.8	1.0	2.0	7.0	25.1	16.2	38.6	1.7	EE	(D)
36	ELECTRIC, ELECTRONIC EQUIPMENT . . . . .	54	41	15.1	91.3	13.0	26.5	71.2	237.4	211.0	446.1	16.0	(NA)	(NA)
361	ELECTRIC DISTRIBUTING EQUIPMENT. . . . .	7	5	3.0	16.4	2.7	5.5	13.7	40.7	44.1	84.8	3.8	(NA)	(NA)
362	ELECTRICAL INDUSTRIAL APPARATUS. . . . .	7	6	3.3	20.7	2.7	5.5	15.8	51.7	40.1	91.9	4.0	EE	(D)
364	ELECT. LIGHTING AND WIRING EQUIP. . . . .	9	■	2.5	17.8	2.1	4.2	13.5	53.3	53.8	105.8	5.5	2.4	37.3
369	MISC. ELECTRICAL EQUIP., SUPPLIES. . . . .	7	4	.4	2.3	.4	1.0	2.0	5.1	7.1	12.4	.2	AA	(D)
37	TRANSPORTATION EQUIPMENT . . . . .	60	33	23.0	222.7	18.9	36.3	156.8	263.5	419.6	676.5	19.8	(NA)	(NA)
379	MISC. TRANSPORTATION EQUIPMENT . . . . .	12	7	.5	3.0	.4	.8	2.2	4.6	8.9	13.3	.2	(NA)	(NA)
38	INSTRUMENTS AND RELATED PRODUCTS	15	7	2.0	10.7	1.8	3.6	8.1	29.3	16.0	43.4	2.1	(NA)	(NA)
39	MISC. MANUFACTURING INDUSTRIES . . . . .	58	17	4.6	25.4	4.0	8.0	20.4	82.8	50.3	130.5	1.9	3.2	41.5
394	TOYS AND SPORTING GOODS. . . . .	17	5	1.0	5.3	.9	1.7	4.2	16.4	8.3	24.4	.5	(NA)	(NA)
399	MISCELLANEOUS MANUFACTURES . . . . .	31	7	.4	2.3	.3	.7	1.5	4.9	4.8	9.8	.4	.3	2.6
—	ADMINISTRATIVE AND AUXILIARY . . . . .	46	24	3.6	40.6	—	—	—	—	—	—	—	1.1	—

Note: The following symbols indicate employment size range for 1967:

AA less than 250 employees      EE 1,000 to 2,499 employees  
BB 250 to 499 employees      FF 2,500 employees and over  
CC 500 to 999 employees

- Represents zero      (NA) Not available. Because of a revision to this industry or industry group in the 1972 edition of the SIC manual, 1967 census data are not available on a comparable basis.      (D) Withheld to avoid disclosing figures for individual companies.

<sup>1</sup>The total cost of materials and value of shipments for industry groups shown may include extensive duplication arising from shipments between establishments in the same industry classification. (For a more complete explanation, see appendix.)

<sup>2</sup>Includes figures for industry groups which have been withheld from publication in order to (a) avoid disclosing figures for individual companies or (b) permit further checking of figures for smaller industry groups. Additional detail will appear in the final report for this State.



## Appendix A. SCOPE AND COVERAGE

This report is one of a series presenting preliminary information, by State, from the 1972 Census of Manufactures. The data will be superseded in a final report which, in turn, will be included in *Volume III, Area Statistics, 1972 Census of Manufactures*. The final report will include a comprehensive discussion of the concepts and definitions used in the census.

The census of manufactures covers each manufacturing establishment in the United States with one paid employee or more; manufacturing establishments with no employees are excluded. Firms which operated more than one establishment were required to file a separate report for each location. Companies which engaged in distinctly different lines of activity at one location were asked to submit separate reports if the company records permitted such a separation and the activities were of significant size.

This report includes figures for administrative offices, warehouses, garages, or other auxiliary units which service manufacturing establishments.

In the 1972 census, the approximately 120,000 manufacturing establishments with fewer than 10 employees were excused from filing reports. Under special arrangements which safeguarded the confidentiality of both tax and census records, data on payrolls, sales, and industry classification from the administrative records of the Social Security Administration and the Internal Revenue Service were made available to the Census Bureau for use in the 1972 Economic Censuses (retail and wholesale trade, service industries, construction industries, manufactures, and mineral industries). Estimates for data other than payrolls and sales for these small establishments were constructed from industry averages. The effect on industry aggregates is slight in most industries. For manufacturing as a whole, these small establishments account for less than 3 percent of the payrolls and value added.

Establishments are classified by industry in accordance with industry definitions described in the 1972 edition of the Standard Industrial Classification (SIC) Manual. For 1972, the SIC was significantly revised and the comparability with prior year's data for some industries was significantly affected. The comparability at the 2- and 3-digit SIC levels was less affected. The final volumes of the 1972 Census of Manufactures will contain a table relating aggregates based on the 1972 SIC with aggregates derived from classifying establishments according to the 1967 SIC definitions.

As in earlier censuses, a number of small establishments may have been misclassified as to industry. However, such possible misclassifications have significant effect on *none* of the statistics except the number of establishments. As indicated above, report forms were not mailed to very small establishments (fewer than 10 employees). The industry classifications for these establishments were assigned on the basis of brief descriptions of the general activity of the establishment. Where the description is incomplete or there are relatively fine lines of demarcation among industries or between manufacturing and nonmanufacturing activity, the code assigned to an establishment could differ from that which would have been assigned on the basis of more complete product information. Therefore, the total establishment count for individual industries should be viewed as an approximation rather than a precise measurement. The counts for establishments with 20 employees or more are more reliable than the total number of establishments.

More detailed figures for this State will appear in the final census reports. Final reports will also include a comprehensive discussion of such concepts as "industry" and "establishment," as well as the various statistical items such as "employment," "value of shipments," and "value added." Similar preliminary and final reports will be issued for other States during the coming months. A series of preliminary summary reports showing U.S. totals for each manufacturing industry and for each State are being issued. Final industry reports and final area reports will be published during 1974.

Order forms describing the individual reports and listing their prices may be obtained from any U.S. Department of Commerce district office or from the Publications Distribution Section, Social and Economic Statistics Administration, Washington, D.C. 20233.

The 1972 Census of Manufactures is the 29th census of manufacturing establishments in the United States. For 1972, it was conducted jointly with the censuses of mineral industries, construction industries, retail trade, wholesale trade, and selected services under authority of Title 13 of the United States Code. Title 13 specifies that a census of manufactures be conducted every 5 years and, as amended, to cover years ending in "2" and "7". Title 13 also authorizes an annual sample survey of manufacturing establishments in interim years.



## Appendix B. EXPLANATION OF TERMS

*(For a more complete discussion of these terms and the method of compiling the Census of Manufactures, see the "Introduction" to the 1967 Census of Manufactures, Volume III).*

**All Employees**—All full-time and part-time employees on the payrolls of operating manufacturing establishments for any part of the pay period ending nearest the 12th of the months specified on the report form. Included are all persons on paid sick leave, paid holidays, and paid vacations during these pay periods. Officers of corporations are included as employees; proprietors and partners of unincorporated firms are excluded. The "all employee" number is the average number of production workers for the midmonth payroll period of March, May, August, and November plus the number of nonproduction employees in mid-March.

**Number of Production Workers**—Workers (up through the working foreman level) engaged in fabricating, processing, assembling, inspecting, receiving, packing, warehousing, shipping (but not delivering), and maintenance, repair, janitorial, and watchman services, product development, auxiliary production for plant's own use (e.g., powerplant), recordkeeping, and other closely associated services. Proprietors and partners are excluded.

**Payroll**—This item includes all forms of compensation such as salaries, wages, commissions, dismissal pay, bonuses, vacation and sick leave pay, and compensation in kind, prior to such deductions as employees' Social Security contributions, withholding taxes, group insurance, union dues, and savings bonds. The total includes salaries of officers of these establishments, if a corporation; it excludes payments to the proprietor or partners, if an unincorporated concern. Respondents were told that in reporting they could follow the definition of payrolls used for calculating the Federal withholding tax.

**Man-Hours of Production Workers**—This total relates to production-worker man-hours worked or paid for at the plant including actual overtime hours (not straight-time equivalent hours). It excludes hours paid for vacation, holidays, or sick leave when the employee was not at the plant.

**Cost of Materials**—The term "Cost of Materials" refers to charges actually paid or payable for items consumed or put into production during the year, including freight and other direct charges incurred by the establishment in acquiring these materials. It includes the cost of materials or fuel consumed regardless of

whether these items were purchased by the establishment from other companies, transferred to it from other establishments of the same company, or withdrawn from inventory during the year. The establishment was requested to value materials transferred from other parts of the company at its approximate market value, not at cost of production. The important components of this cost item are (a) all raw materials, semifinished goods, parts, components, containers, scrap, and supplies put into production or used as operating supplies and for repair and maintenance during the year; (b) electric energy purchased; (c) fuels consumed for heat, power, or the generation of electricity; (d) work done by others on materials or parts furnished by manufacturing establishments (contract work); and (e) products bought and resold in the same condition.

**Value of Shipments**—The value of shipments is the received or receivable net selling value, f.o.b. plant (exclusive of freight and taxes), of all products shipped, both primary and secondary, as well as all miscellaneous receipts such as receipts for contract work performed for others, installation and repair, sales of scrap, and sale of products bought and resold without further processing. Included are all items made by the establishment or for it under contract from materials owned by it whether sold, transferred to other plants of the same company, or shipped on consignment. The net selling value of products made in one plant on a contract basis from materials owned by another was reported by the plant providing the materials.

In the case of multiunit companies, the manufacturer was requested to report the value of products transferred to other establishments of the same company at full economic value; i.e., to include not only the direct costs of production but also a reasonable proportion of "all other costs" (including company overhead) and profit.

**Duplication in Cost of Materials and Value of Products**—The aggregate cost of materials and value-of-shipments figures for industry groups and for all manufacturing industries may include large amounts of duplication since the products of some industries are used as materials by others. With some important exceptions, such as motor vehicles and parts, this duplication is not significant within individual industries but arises from the addition of the totals of related industries in successive stages of the production of a finished manufactured product. Examples are the addition of flour mills to bakeries in the food group and the addition of pulp mills to paper mills in the paper and allied products group of industries. Esti-



mates of this duplication indicate that the value of manufactured products exclusive of such duplication—the value of finished manufactures—approximates two-thirds of the total value of products.

Prior to 1962, the Bureau of the Census did not publish figures for cost of materials or value of shipments if they contained significant duplication. Effective with the 1962 annual survey these figures were shown at all industry levels for the United States to meet the requests for their use in studies in which the presence of an indeterminate amount of duplication is not a limiting factor. However, they are appropriately footnoted. Effective with the 1964 annual survey, these industry group totals are also shown at the State, standard metropolitan statistical area, and large-county level.

Even where there is no significant amount of duplication, value-of-shipments figures are deficient as measures of the relative economic importance of individual manufacturing industries or geographic areas because of the wide variation in ratio of materials, labor, and other processing costs to value of shipments among industries.

**Value Added by Manufacture**—This measure of manufacturing activity is derived by subtracting the cost of materials, supplies, containers, fuel, purchased electricity, and cost of resales contract work from the value of shipments for products manufactured plus resales and receipts for services rendered. The result of this calculation is adjusted by the net change in finished goods and work-in-process inventories between the beginning and end of the year. (In the few industries that report value of production rather than value of shipments, only changes in work-in-process inventories are used to adjust value added. In the shipbuilding and repairing industry, no inventory adjustment is made.)

“Value added” avoids the duplication in the value of shipments figure which results from the use of products of some establishments as materials by others. Value added is considered to be the best value measure available for comparing the relative economic importance of manufacturing among industries and geographic areas.

**Expenditures for Plant and Equipment**—Manufacturing establishments in operation and establishments under construction but not yet in operation, were asked to report their expenditures for (a) permanent additions and major alterations to the manufacturing establishment, and (b) new machinery and equipment used for replacement purposes and additions to plant capacity if they are of the type for which depreciation accounts are ordinarily maintained.

These totals exclude expenditures for new facilities and equipment leased from nonmanufacturing concerns; new facilities owned by the Federal Government but operated under contract by private companies; and plant and equipment furnished to the manufacturer by communities and nonprofit organizations. Expenditures for used plant and equipment (although reported in the census), expenditures for land, and cost of maintenance and repairs charged as current operating expense are also omitted from the figures for new capital expenditures.

**Central Administrative Offices and Auxiliary Units**—In the 1972 census as in previous years, respondents were asked to file separate reports for central administrative offices or auxiliary units which were (1) at different locations from the establishments served or, (2) at the same location as one of these establishments but were not operated as an integral part thereof and served two or more establishments. The functions of employees in central administrative offices include general company policy determination, planning and management (that is, company purchasing, accounting, general engineering, direction of company personnel matters, and legal and patent matters). Auxiliaries are storage facilities, garages, repair shops, purchasing offices, sales promotion offices, and research laboratories serving the plants or central management of the company.

**Standard Metropolitan Statistical Areas**—Standard metropolitan statistical areas (SMSA) are integrated economic and social units with a large volume of daily travel and communication between the central city and outlying parts of the area.<sup>1</sup> Each area (except in New England) consists of one whole county or more. An area may contain not only highly industrialized counties but also adjoining counties which, though primarily residential in character, contribute significantly to the industrial counties' labor force and are socially and economically integrated with the central city. These areas are defined by the Federal Committee on Standard Metropolitan Statistical Areas of the Office of Management and Budget for general-purpose use throughout the Federal Government in presenting economic and social data. In the New England States, similar intergration criteria are applied in defining

<sup>1</sup> Each standard metropolitan statistical area must include either (1) a city with 50,000 or more inhabitants, or (2) a city having a population of at least 25,000 which (a) with the addition of the population of contiguous places has a population density of at least 1,000 persons per square mile; (b) constitutes, for general economic and social purposes, a single community with a combined population of at least 50,000; and (c) includes a total population of at least 75,000 in the county or counties in which the city and contiguous places are located.

SMSA's on a city and town basis because towns rather than counties are regarded as the significant unit in this region of the country.

The requirement that each SMSA consist of county units (except in New England) sometimes results in the inclusion in an area of considerable amount of territory which would not ordinarily be considered "metropolitan," much less "industrial." It is recognized that metropolitan areas could be more accurately defined in terms of smaller area segments such as minor civil

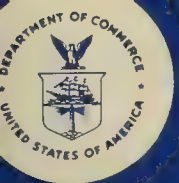
divisions, but the usefulness of areas so defined would be limited by the fact that many types of economic and social data are available only on a county basis.

Each SMSA is designated by the name of the principal city of the area. In addition to the name of the principal city, the area title may include one or two additional city names.

The data for SMSA's which changed definition since the 1967 census have not been retabulated on the new basis for years prior to 1972.







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ued March 1974

U. S. DEPARTMENT OF COMMERCE • Social and Economic Statistics Administration • BUREAU OF THE CENSUS

PRELIMINARY REPORT  
**1972 CENSUS OF  
MANUFACTURES**  
AREA SERIES**Missouri**

Value added by manufacturing in 1972 in the State of Missouri amounted to \$8,178 million, an 11-percent increase from 1971 and a 31-percent increase from 1967.

This report presents preliminary results from the 1972 Census of Manufactures for the State, its Standard Metropolitan Statistical Areas, and its counties.

Data are provided for industry groups within the State. Historical data, back to 1958, are included for the State as a whole,

and 1967 figures on employment and value added are provided for the smaller areas.

The figures in this report have been subjected to only preliminary review and must be regarded as approximation of the final census figures. No adjustments have been made in the value figures for changes in price level.

For an explanation of the terms used in the tables, see the appendix at the end of this report.

**TABLE 1. General Statistics for the State: 1972 and Earlier Years**

(See appendix, Explanation of Terms)

Year	Establishments		All employees <sup>1</sup>		Production workers			Value added by manufacture	Cost of materials <sup>2</sup>	Value of shipments <sup>2</sup>	Capital expenditures, new
	Total	With 20 employees or more	Number	Payroll	Number	Man-hours	Wages				
	(number)	(number)	(1,000)	(million dollars)	(1,000)	(millions)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(million dollars)
MISSOURI											
1972 Census .....	6,680	2,454	436.2	3,920.0	300.1	585.8	2,311.6	8,178.3	10,780.5	18,754.2	348.9
1971 ASM .....	(NA)	(NA)	436.5	3,673.2	296.0	569.5	2,135.0	7,525.1	9,699.9	17,198.4	363.3
1970 ASM .....	(NA)	(NA)	449.3	3,557.8	306.3	600.4	2,077.4	6,828.5	9,158.2	15,995.8	379.4
1969 ASM .....	(NA)	(NA)	466.3	3,458.6	322.3	631.0	2,052.8	6,766.1	9,515.1	16,237.7	299.3
1968 ASM .....	(NA)	(NA)	460.5	3,302.6	324.5	642.8	2,002.3	6,635.0	9,356.8	15,925.1	309.6
1967 Census .....	6,545	2,457	452.2	3,048.9	320.9	631.3	1,851.7	5,895.0	8,229.0	14,085.4	346.8
1966 ASM .....	(NA)	(NA)	450.9	2,922.9	317.4	639.2	1,774.5	5,807.7	8,221.2	13,939.8	317.4
1965 ASM .....	(NA)	(NA)	426.4	2,627.7	301.0	597.3	1,585.0	5,136.7	7,726.0	12,822.0	278.4
1964 ASM .....	(NA)	(NA)	401.6	2,387.0	283.0	565.4	1,450.8	4,706.4	6,830.1	11,475.6	227.5
1963 Census .....	6,540	2,325	391.4	2,235.2	276.2	547.8	1,361.7	4,296.0	(NA)	(NA)	211.1
1962 ASM .....	(NA)	(NA)	383.1	2,066.3	272.8	535.0	1,277.9	4,032.8	(NA)	(NA)	206.2
1961 ASM .....	(NA)	(NA)	373.5	1,927.9	263.7	513.6	1,178.9	3,644.8	(NA)	(NA)	170.8
1960 ASM .....	(NA)	(NA)	392.7	1,966.6	280.1	545.8	1,222.8	3,772.3	(NA)	(NA)	159.7
1959 ASM .....	(NA)	(NA)	391.4	1,918.3	282.2	552.9	1,188.9	3,694.1	(NA)	(NA)	175.6
1958 Census .....	6,588	2,215	380.5	1,771.1	271.5	519.3	1,088.7	3,250.8	(NA)	(NA)	185.9

Note: "ASM" data are based on a representative sample of manufacturing establishments canvassed in the Annual Survey of Manufactures. These estimates may differ from the results of a complete canvass of all manufacturing establishments. The standard errors associated with these estimates are published in the annual survey of manufactures volumes for this period. For comparative purposes, the 1972 ASM estimate for the State of Missouri was 450 thousand employees, and \$8,591 million in value added with corresponding standard error of estimate of 1 and 1.

(NA) Not available.

<sup>1</sup>Includes employment and payroll at central administrative offices and auxiliary units. (For a definition of these units, see appendix.)

<sup>2</sup>The total cost of materials and value of shipments may include extensive duplication arising from shipments between establishments in the same industry classification. (For a more complete explanation, see appendix.)

TABLE 2. General Statistics for the State, Standard Metropolitan Statistical Areas, and Counties: 1972 and 1967

(See appendix, Explanation of Terms)

State, standard metropolitan statistical areas, and counties <sup>1</sup>	1972											1967	
	Establishments		All employees <sup>2</sup>		Production workers			Value added by manufacture	Cost of materials <sup>3</sup>	Value of shipments <sup>3</sup>	Capital expenditures, new	All employees	Value added by manufacture
	Total	With 20 employees or more	Number	Payroll	Number	Man-hours	Wages						
	(number)	(number)	(1,000)	(million dollars)	(1,000)	(million)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(1,000)	(million dollars)
MISSOURI, TOTAL . . . . .	6 680	2 454	436.2	3 920.0	300.1	585.8	2 311.6	8 178.3	10 780.5	18 754.2	348.9	452.2	5 895.0
STANDARD METROPOLITAN STATISTICAL AREAS <sup>4</sup>													
COLUMBIA . . . . .	52	16	2.1	18.8	1.2	2.4	8.3	40.0	40.4	80.0	2.6	1.9	20.2
KANSAS CITY . . . . .	1 870	697	120.0	1 153.6	78.4	152.5	679.9	2 875.9	3 963.5	6 764.0	155.4	129.4	2 070.7
PORTION IN MISSOURI . . . . .	1 376	492	88.5	852.1	56.2	109.2	486.2	2 008.6	2 606.4	4 553.5	111.1	97.6	1 449.1
PORTION IN KANSAS . . . . .	494	205	31.5	301.5	22.2	43.3	193.7	867.3	1 357.1	2 210.5	44.3	31.7	621.6
ST. JOSEPH . . . . .	106	61	9.5	77.6	6.9	13.4	51.0	177.3	478.4	653.4	17.3	10.7	137.4
ST. LOUIS . . . . .	3 166	1 235	256.8	2 567.4	166.2	333.2	1 497.4	5 133.4	6 660.0	11 665.2	228.8	296.9	4 176.1
PORTION IN ILLINOIS . . . . .	444	171	42.0	418.0	30.1	64.1	304.9	937.5	1 604.6	2 540.2	78.7	55.0	929.6
PORTION IN MISSOURI . . . . .	2 722	1 064	214.8	2 149.4	136.1	269.1	1 192.5	4 195.9	5 055.4	9 125.0	150.1	241.9	3 246.5
SPRINGFIELD . . . . .	264	95	17.6	129.6	13.8	26.6	90.7	246.0	629.2	873.1	21.2	14.3	177.1
COUNTIES													
ADAIR . . . . .	20	9	1.9	11.6	1.7	3.4	9.8	38.5	27.9	64.8	3.1	1.4	20.2
AUDRAIN . . . . .	34	15	4.1	36.5	2.8	5.6	21.2	56.8	72.9	129.4	1.7	3.9	46.1
BARRY . . . . .	43	16	1.9	10.4	1.5	2.9	8.0	15.9	25.7	43.1	.7	1.7	10.7
BARTON . . . . .	13	6	.7	4.1	.5	1.1	2.5	9.6	9.1	18.6	.2	.5	3.3
BATES . . . . .	22	6	.5	3.2	.3	.6	1.4	12.1	3.6	15.6	1.1	.2	1.3
BOLLINGER . . . . .	21	5	.3	1.5	.3	.5	1.2	2.6	4.2	7.1	.1	.4	2.9
BOONE . . . . .	52	16	2.1	18.8	1.2	2.4	8.3	40.0	40.4	80.0	2.6	1.9	20.2
BUTLER . . . . .	47	9	1.4	7.7	1.2	2.4	6.7	18.4	19.8	37.9	1.1	1.0	9.5
CALLAWAY . . . . .	20	7	1.1	8.7	.9	2.0	7.0	20.4	13.8	34.1	1.3	1.1	14.0
CAMDEN . . . . .	25	3	.5	2.7	.4	1.1	2.2	5.2	3.6	8.5	.5	.1	1.7
CAPE GIRARDEAU . . . . .	90	32	4.7	32.9	4.0	7.9	25.5	70.9	87.5	157.3	11.1	3.7	35.7
CASS . . . . .	37	7	.6	3.9	.4	.8	2.5	9.1	11.6	21.1	.3	.6	6.1
CEDAR . . . . .	14	7	.8	4.7	.8	1.5	4.0	11.1	8.5	19.3	.2	.8	6.8
CHARITON . . . . .	12	2	.4	2.7	.3	.6	2.1	4.5	2.4	6.6	.1	.1	1.1
CHRISTIAN . . . . .	21	8	1.0	6.2	.9	1.9	5.1	11.9	11.9	23.5	.4	.8	4.9
CLAY . . . . .	177	80	14.7	149.3	10.1	20.5	96.7	392.1	346.2	1 218.3	15.7	12.3	186.3
COLE . . . . .	47	13	3.1	19.6	2.2	4.3	12.5	85.4	84.0	120.0	2.8	2.7	46.7
COOPER . . . . .	16	10	1.0	6.6	.6	1.3	3.5	13.4	14.0	27.6	2.8	1.2	8.9
CRAWFORD . . . . .	27	11	1.1	6.1	1.0	1.9	5.1	17.7	18.5	36.2	.9	1.1	10.1
DENT . . . . .	27	8	1.3	8.0	1.1	2.3	6.3	16.6	12.5	28.5	.7	.9	6.9
DOUGLAS . . . . .	12	3	.5	2.7	.5	.9	2.3	4.9	6.0	10.9	.1	(0)	(0)
DUNKLIN . . . . .	37	12	3.0	18.6	2.6	4.8	14.4	45.4	36.9	82.3	2.3	1.7	16.0
FRANKLIN . . . . .	96	42	5.4	33.3	4.4	8.4	25.4	85.1	78.6	159.1	2.7	5.6	56.0
GASCONADE . . . . .	20	9	1.2	6.5	1.2	2.4	5.7	20.2	13.3	31.8	.6	1.3	12.9
GENTRY . . . . .	10	4	.3	1.6	.2	.3	.9	2.4	1.4	3.6	.1	.2	1.9
GREENE . . . . .	243	87	16.6	123.4	12.9	24.7	85.6	234.1	617.3	849.6	20.8	13.5	172.2
HENRY . . . . .	18	8	1.6	8.2	1.2	2.4	5.5	20.5	55.8	75.7	.5	.9	7.7
HOWARD . . . . .	10	3	.4	3.0	.3	.7	2.3	5.7	7.3	12.9	.2	.3	1.5
HOWELL . . . . .	51	16	2.2	10.9	2.0	3.7	9.0	22.6	22.4	44.5	.5	2.1	15.8
IRON . . . . .	15	5	.6	3.9	.5	1.0	2.9	12.4	31.3	39.1	.9	.4	2.5
JACKSON . . . . .	1 133	398	72.7	696.2	45.4	87.4	385.5	1 601.7	1 743.5	3 303.4	94.6	84.6	1 254.6
JASPER . . . . .	185	82	10.8	79.8	8.5	16.6	55.7	151.0	245.9	397.7	9.3	10.1	121.9
JEFFERSON . . . . .	70	17	3.6	30.3	3.0	5.6	22.7	92.6	59.4	152.1	6.0	3.9	66.4
JOHNSON . . . . .	20	6	1.0	6.2	.8	1.4	4.8	20.6	15.7	36.4	.8	1.0	10.9
LACLEDE . . . . .	37	16	2.6	15.0	2.0	3.6	10.9	23.7	21.2	45.3	.9	1.7	11.8
LAFAYETTE . . . . .	34	14	1.2	6.3	1.0	1.8	4.7	11.4	14.1	24.9	.4	1.0	4.9
LAWRENCE . . . . .	40	17	2.0	12.3	1.6	3.2	9.4	30.9	53.9	84.1	1.1	2.0	23.8
LINCOLN . . . . .	13	5	.5	2.7	.3	.6	1.6	4.1	2.2	6.3	.1	.4	3.1
LINN . . . . .	23	10	1.4	7.3	1.2	2.4	6.1	16.5	11.2	27.5	.4	1.0	7.8
LIVINGSTON . . . . .	22	11	1.0	5.7	.8	1.5	4.0	14.6	21.3	38.6	.6	.9	11.7
MC DONALD . . . . .	22	9	1.5	7.7	1.3	2.1	5.3	14.7	40.6	54.7	.6	.6	6.2
MADISON . . . . .	13	2	.5	2.7	.5	.9	2.6	6.2	4.6	10.8	.1	.5	4.5
MARIES . . . . .	8	3	.3	1.8	.3	.5	1.7	3.7	2.7	6.4	.2	.6	5.6
MARION . . . . .	33	16	1.5	9.3	1.2	2.0	6.9	17.1	17.8	34.1	3.0	1.0	9.8
MILLER . . . . .	22	9	.6	2.6	.5	.9	2.0	4.6	3.8	8.2	.7	.5	3.4
MISSISSIPPI . . . . .	11	4	.6	3.1	.6	1.0	2.9	6.8	4.5	11.4	.1	.6	5.9
MONITEAU . . . . .	24	3	1.4	7.6	1.2	2.3	6.0	13.4	17.7	31.3	.5	1.3	9.7
MONTGOMERY . . . . .	19	4	.5	3.3	.5	.9	2.2	12.8	14.3	26.8	.6	.7	7.1
MORGAN . . . . .	21	8	.8	3.8	.7	1.3	3.3	7.3	7.2	14.5	.2	.4	1.7
NEWTON . . . . .	47	16	2.3	15.4	2.0	3.8	11.3	31.7	52.4	83.8	2.7	2.1	22.8
NODAWAY . . . . .	20	7	.4	2.7	.3	.6	1.8	9.3	8.5	17.6	.5	.3	3.3
OREGON . . . . .	17	3	.4	1.6	.4	.6	1.5	2.4	1.5	3.9	.1	(0)	(0)
OSAGE . . . . .	19	7	.8	3.3	.7	1.2	2.6	8.1	10.7	18.5	.5	.5	3.4
PEMISCOT . . . . .	18	5	.9	4.8	.8	1.5	4.1	11.9	8.4	20.2	.2	1.1	9.4
PERRY . . . . .	29	7	1.1	6.3	1.0	2.0	5.3	12.6	18.5	31.5	.4	.8	7.7
PETTIS . . . . .	46	20	2.9	18.8	2.3	4.5	12.2	43.6	52.8	97.6	2.3	2.1	20.9
PHELPS . . . . .	21	7	.6	3.5	.5	.8	2.1	6.5	6.9	13.5	.3	.7	10.0
PIKE . . . . .	16	8	1.1	10.3	.8	1.6	6.7	34.0	26.2	60.7	2.3	1.2	17.5
POLK . . . . .	16	3	.6	3.0	.4	.8	2.0	6.4	4.2	10.6	.9	.3	3.0
PULASKI . . . . .	14	4	.7	3.4	.6	1.1	3.2	7.2	3.2	10.5	.1	.9	6.4
RALLS . . . . .	10	4	.5	3.7	.4	.7	2.8	13.8	13.5	26.9	1.4	.8	14.8
RANDOLPH . . . . .	30	13	1.3	9.5	1.1	2.0	6.3	32.7	34.8	67.6	1.0	.8	10.5
ST. CHARLES . . . . .	74	23	4.5	42.9	2.6	5.0	20.2	73.9	37.2	109.1	2.5	4.1	44.8
ST. FRANCOIS . . . . .	42	12	1.3	8.3	1.1	2.0	5.5	14.6	12.1	26.3	.8	1.4	10.8
ST. LOUIS . . . . .	1 019	379	75.6	808.1	47.7	95.1	441.4	1 544.1	2 636.9	4 198.6	49.7	96.5	1 285.8
STE. GENEVIEVE . . . . .	15	6	2.2	17.7	1.8	3.9	12.7	37.8	24.1	61.6	(0)	1.7	21.5
SALINE . . . . .	21	9	2.1	12.7	1.9	3.7	10.6	28.6	95.9	123.6	1.8	1.9	19.6

See footnotes at end of table.



TABLE 2. General Statistics for the State, Standard Metropolitan Statistical Areas, and Counties: 1972 and 1967—Continued

(See appendix, Explanation of Terms)

State, standard metropolitan statistical areas, and counties <sup>1</sup>	1972											1967	
	Establishments		All employees <sup>2</sup>		Production workers			Value added by manu- facture	Cost of materials <sup>3</sup>	Value of shipments <sup>3</sup>	Capital expendi- tures, new	All employees	Value added by manu- facture
	Total	With 20 employees or more	Number	Payroll	Number	Man-hours	Wages						
	(number)	(number)	(1,000)	(million dollars)	(1,000)	(million)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(1,000)	(million dollars)
COUNTIES—CONTINUED													
SCOTT. . . . .	37	17	2.7	15.7	2.1	4.1	11.4	29.5	34.3	63.6	1.4	2.3	22.3
SHANNON. . . . .	21	5	.5	2.1	.5	.9	2.0	4.3	3.0	7.1	.1	.7	3.5
STODDARD. . . . .	42	16	2.7	13.0	2.3	4.2	10.7	27.8	29.2	57.8	.9	1.8	12.2
STONE. . . . .	9	2	.5	1.9	.5	.8	1.6	2.9	2.1	5.1	.1	.3	2.2
TANEY. . . . .	24	4	.4	1.7	.3	.6	1.3	3.6	3.4	7.0	.5	.3	2.2
TEXAS. . . . .	43	9	1.9	9.0	1.8	3.3	8.0	18.4	27.4	46.8	.4	1.4	9.9
VERNON. . . . .	21	■	.8	4.8	.6	1.1	3.1	10.9	8.0	17.7	2.2	.4	3.1
WARREN. . . . .	22	10	.9	7.0	.7	1.3	4.5	42.3	53.9	97.4	1.0	.8	5.6
WASHINGTON. . . . .	11	■	.6	3.4	.6	1.2	3.2	8.1	4.8	13.3	.1	(D)	(D)
WAYNE. . . . .	27	4	.4	1.9	.3	.6	1.5	2.6	13.7	16.3	.4	.3	5.0
WRIGHT. . . . .	18	5	1.2	6.1	1.0	1.9	5.1	11.6	10.1	21.6	.4	.8	7.1
ST. LOUIS CITY. . . . .	1 459	612	125.7	1 274.8	78.4	155.0	682.8	2 400.2	2 243.3	4 506.1	89.2	131.9	1 793.5

Note: The following symbols indicate employment size range for 1967:

AA less than 250 employees      EE 1,000 to 2,499 employees  
BB 250 to 499 employees      FF 2,500 employees and over  
CC 500 to 999 employees

(D) Withheld to avoid disclosing figures for individual companies.

<sup>1</sup>Some counties were withheld from publication in order to a avoid disclosing figures for individual companies or b permit further checking of the figures for smaller counties. Additional detail will appear in the final report for this State.

<sup>2</sup>Includes employment and payroll at central administrative offices and auxiliary units. (For a definition of these units, see appendix.)

<sup>3</sup>The total cost of materials and value of shipments may include extensive duplication arising from shipments between establishments in the same industry classification. (For a more complete explanation, see appendix.)

<sup>4</sup>The standard metropolitan statistical areas of this State are defined as follows:

COLUMBIA SMSA: Coextensive with Boone County, MO.

KANSAS CITY, MO-KS, SMSA: Consists of Cass, Clay, Jackson, Platte, and Ray Counties, MO, and Johnson and Wyandotte Counties, KS.

ST. JOSEPH SMSA: Consists of Andrew and Buchanan Counties, MO.

ST. LOUIS, MO.-IL, SMSA: Consists of St. Louis city, and Franklin, Jefferson, St. Charles, and St. Louis Counties, MO, and Clinton, Madison, Monroe, and St. Clair Counties, IL.

SPRINGFIELD SMSA: Consists of Christian and Greene Counties, MO.

TABLE 3. General Statistics for the State, by Industry Groups and Industries: 1972 and 1967

(See appendix, Explanation of Terms)

Code	Industry	1972											1967	
		Establishments		All employees		Production workers			Value added by manufacture	Cost of materials <sup>1</sup>	Value of shipments <sup>1</sup>	Capital expenditures, new	All employees	Value added by manufacture
		Total (number)	With 20 employees or more (number)	Number (1,000)	Payroll (million dollars)	Number (1,000)	Man-hours (million)	Wages (million dollars)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(1,000)	(million dollars)
	ALL INDUSTRIES, TOTAL <sup>2</sup> . . . . .	6 690	2 454	436.2	3 920.0	300.1	585.8	2 311.6	8 178.3	10 780.5	18 754.2	348.9	452.2	5 895.0
20	FOOD AND KINDRED PRODUCTS . . . . .	668	304	41.4	370.4	28.8	57.5	238.7	1 012.4	2 577.2	3 589.2	75.2	48.5	799.8
201	MEAT PRODUCTS . . . . .	135	52	7.5	59.7	6.3	12.2	45.7	136.9	686.2	822.5	9.7	11.1	126.9
2011	MEATPACKING PLANTS . . . . .	84	24	3.1	30.2	2.5	5.1	23.3	69.4	434.7	503.9	6.4	7.2	92.0
2013	SAUSAGES AND OTHER PREPARED MEATS . . . . .	25	10	2.0	18.0	1.4	3.0	12.7	46.9	175.2	222.6	2.6	1.2	15.3
2016	POULTRY DRESSING PLANTS . . . . .	19	15	2.3	10.5	2.2	3.8	9.1	18.6	66.6	84.5	.5	(NA)	(NA)
202	DAIRY PRODUCTS . . . . .	101	54	6.2	57.2	3.8	7.7	30.1	128.0	569.9	698.2	5.5	7.2	88.1
2022	CHEESE, NATURAL AND PROCESSED . . . . .	22	13	2.0	15.5	1.6	3.2	11.5	33.5	303.9	336.7	1.4	1.6	14.7
2027	CONDENSED AND EVAPORATED MILK . . . . .	12	7	.9	8.0	.7	1.4	5.2	17.0	75.0	93.1	1.6	.9	13.8
2024	ICE CREAM AND FROZEN DESSERTS . . . . .	13	7	.4	4.4	.2	.5	1.9	9.7	15.6	25.3	.5	.7	9.3
2026	FLUID MILK . . . . .	46	26	2.8	28.9	1.2	2.6	11.2	66.9	164.8	231.6	2.0	3.8	49.1
204	GRAIN MILL PRODUCTS . . . . .	94	42	4.8	39.9	3.4	7.0	26.5	141.3	404.2	544.2	13.2	4.6	106.2
2041	FLOUR AND OTHER GRAIN MILL PRODUCTS . . . . .	12	9	1.1	10.9	.8	1.9	7.8	37.7	170.9	208.0	5.5	EE	(D)
205	BAKERY PRODUCTS . . . . .	92	40	6.3	54.7	3.8	7.5	32.2	123.9	85.0	208.8	4.1	7.3	95.0
2051	BREAD, CAKE, AND RELATED PRODUCTS . . . . .	71	33	5.5	49.2	3.1	6.3	27.9	101.6	70.1	171.5	3.8	6.5	80.6
2052	COOKIES AND CRACKERS . . . . .	11	7	.8	5.5	.7	1.2	4.3	22.3	14.9	37.2	.3	.8	14.4
207	FATS AND OILS . . . . .	18	12	1.0	8.6	.8	1.7	6.2	34.6	185.9	222.4	4.9	(NA)	(NA)
2077	ANIMAL AND MARINE FATS AND OILS . . . . .	10	4	.3	2.7	.3	.6	1.8	15.7	29.5	45.1	4.2	.2	2.0
208	BEVERAGES . . . . .	93	40	7.9	98.1	5.1	10.4	64.5	287.1	286.6	573.8	22.9	9.9	251.9
2086	BOTTLED AND CANNED SOFT DRINKS . . . . .	47	33	3.2	29.7	1.2	2.3	8.3	61.4	62.5	122.8	3.6	3.6	51.4
2087	FLAVORING EXTRACTS AND SIRUPS, NEC . . . . .	13	5	.4	3.5	.3	.6	2.0	36.2	29.4	66.6	(D)	.4	24.1
209	MISC. FOODS AND KINDRED PRODUCTS . . . . .	89	30	3.0	22.7	1.6	2.8	9.6	74.7	118.0	192.0	1.4	(NA)	(NA)
2095	ROASTED COFFEE . . . . .	13	5	.3	2.9	.2	.4	1.4	17.1	57.5	74.7	.2	.5	15.1
2099	FOOD PREPARATIONS, NEC . . . . .	47	17	1.8	13.9	.9	1.6	5.8	49.0	39.8	88.1	.8	1.7	26.3
229	MISCELLANEOUS TEXTILE GOODS . . . . .	12	4	.5	3.0	.4	.8	2.1	3.7	5.0	8.7	.1	.6	7.6
23	APPAREL, OTHER TEXTILE PRODUCTS . . . . .	362	230	30.7	153.4	26.7	47.3	117.2	284.4	245.2	528.4	4.8	32.6	223.4
2311	MEN'S AND BOYS' SUITS AND COATS . . . . .	14	13	1.8	11.1	1.6	3.0	8.1	20.7	17.8	38.2	(D)	3.2	21.7
232	MEN'S AND BOYS' FURNISHINGS . . . . .	76	60	11.2	49.1	10.2	18.0	40.8	93.8	74.9	169.7	2.3	9.7	55.6
2329	MEN'S AND BOYS' CLOTHING, NEC . . . . .	22	19	2.5	10.8	2.2	4.0	8.7	21.9	23.5	45.1	.8	1.0	7.8
233	WOMEN'S, AND MISSES' OUTERWEAR . . . . .	88	59	8.0	45.3	6.7	11.4	32.7	76.4	49.3	125.8	.6	10.2	79.3
2335	WOMEN'S AND MISSES' DRESSES . . . . .	44	26	3.5	18.4	2.9	5.0	13.9	33.3	14.5	47.3	.3	4.5	37.6
2337	WOMEN'S AND MISSES' SUITS AND COATS . . . . .	21	10	2.3	15.8	1.9	3.0	9.9	25.5	24.5	50.5	.1	3.1	23.9
234	WOMEN'S & CHILDREN'S UNDERGARMENTS . . . . .	10	10	1.9	10.2	1.6	2.7	8.1	24.2	16.4	39.9	.1	FF	(D)
2341	WOMEN'S AND CHILDREN'S UNDERWEAR . . . . .	10	10	1.9	10.2	1.6	2.7	8.1	24.2	16.4	39.9	.1	FF	(D)
235	HATS, CAPS, AND MILLINERY . . . . .	30	32	2.9	12.1	2.6	4.7	9.9	21.8	20.3	41.3	(D)	2.9	18.4
236	MISC. APPAREL AND ACCESSORIES . . . . .	15	11	1.2	5.1	1.0	1.8	3.6	10.9	8.9	19.7	.2	.9	4.7
239	MISC. FABRICATED TEXTILE PRODUCTS . . . . .	116	40	3.3	18.1	2.7	5.1	12.5	31.0	52.1	82.7	.9	3.5	26.1
2392	HOUSE FURNISHINGS, NEC . . . . .	20	3	.5	2.3	.4	.7	1.5	4.2	6.5	10.7	.1	.5	3.3
2394	CANVAS AND RELATED PRODUCTS . . . . .	25	9	1.0	5.7	.8	1.6	3.8	9.9	15.9	25.3	.3	CC	(D)
2395	FABRICATED TEXTILE PRODUCTS, NEC . . . . .	15	0	.5	2.4	.4	.8	1.8	4.7	6.7	11.4	.2	.5	2.5
24	LUMBER AND WOOD PRODUCTS . . . . .	603	113	8.7	54.0	7.4	14.1	40.1	98.1	132.9	235.0	5.4	(NA)	(NA)
242	SAWMILLS AND PLANING MILLS . . . . .	304	24	2.5	15.7	2.2	4.2	12.2	37.0	37.0	61.9	1.9	3.0	19.5
2421	SAWMILLS AND PLANING MILLS, GENERAL . . . . .	260	13	1.5	10.4	1.3	2.5	6.1	17.1	27.6	44.3	1.4	1.3	8.8
2426	HARDWOOD DIMENSION AND FLOORING . . . . .	24	11	.8	4.5	.7	1.4	3.5	7.1	7.3	14.3	.3	(NA)	(NA)
243	MILLWORK, PLYWOOD, STRUC. MEMBERS . . . . .	89	26	1.6	10.4	1.3	2.5	7.5	17.5	22.2	39.2	1.1	(NA)	(NA)
2431	MILLWORK . . . . .	40	15	.9	6.4	.7	1.5	4.5	11.1	15.5	26.3	.4	(NA)	(NA)
2434	WOOD KITCHEN CABINETS . . . . .	20	6	.4	1.8	.3	.5	1.4	2.9	2.3	5.1	.5	(NA)	(NA)
244	WOOD CONTAINERS . . . . .	32	18	1.3	6.3	1.1	2.0	4.9	11.4	11.8	23.9	.3	(NA)	(NA)
2448	WOOD PALLETS AND SKIDS . . . . .	17	13	.6	2.6	.5	.9	2.1	5.5	6.8	12.2	.2	(NA)	(NA)
245	WOOD BUILDINGS AND MOBILE HOMES . . . . .	16	13	1.3	10.3	1.1	2.1	6.8	22.7	37.0	58.7	.6	(NA)	(NA)
2451	MOBILE HOMES . . . . .	8	0	.7	5.0	.5	1.1	2.8	11.9	21.9	33.4	.2	(NA)	(NA)
2452	PREFABRICATED WOOD BUILDINGS . . . . .	8	7	.6	5.4	.5	1.0	4.0	10.8	15.2	25.3	.4	(NA)	(NA)
249	MISCELLANEOUS WOOD PRODUCTS . . . . .	113	30	1.8	10.3	1.6	3.0	7.8	19.0	22.5	41.6	1.3	(NA)	(NA)
2491	WOOD PRESERVING . . . . .	14	7	.4	1.9	.3	.6	1.5	4.3	7.4	11.9	.4	8B	(D)
2499	WOOD PRODUCTS, NEC . . . . .	94	23	1.4	8.4	1.2	2.4	6.2	14.7	15.1	29.7	.9	(NA)	(NA)
25	FURNITURE AND FIXTURES . . . . .	172	71	7.4	53.4	5.9	11.4	35.9	107.6	104.3	208.7	4.9	5.1	46.4
251	HOUSEHOLD FURNITURE . . . . .	83	30	4.1	26.4	3.4	6.5	18.7	54.7	63.1	117.3	3.8	(NA)	(NA)
2511	WOOD HOUSEHOLD FURNITURE . . . . .	33	14	1.6	10.1	1.4	2.7	8.0	19.1	28.0	46.9	1.7	(NA)	(NA)
2512	UPHOLSTERED HOUSEHOLD FURNITURE . . . . .	14	9	.9	5.7	.8	1.4	4.5	13.0	8.3	21.1	1.5	(NA)	(NA)
2515	MATRESSES AND BEDSPRINGS . . . . .	27	4	.8	6.2	.6	1.2	3.7	12.3	15.3	27.8	.2	CC	(D)
252	OFFICE FURNITURE . . . . .	11	7	.8	6.4	.6	1.2	4.5	12.9	12.9	25.5	(D)	.2	2.6
2541	WOOD PARTITIONS AND FIXTURES . . . . .	24	9	.6	5.4	.5	1.0	3.8	8.8	5.4	14.0	.1	.6	6.5
26	PAPER AND ALLIED PRODUCTS . . . . .	134	90	12.6	103.9	9.8	19.5	72.0	209.7	273.7	480.3	17.7	11.9	149.2
264	MISC. CONVERTED PAPER PRODUCTS . . . . .	63	35	5.6	46.8	4.3	8.5	31.4	98.8	134.2	230.2	11.9	5.1	62.2
2642	ENVELOPES . . . . .	12	9	1.2	10.6	1.0	1.9	6.9	19.7	13.8	33.4	.5	1.3	17.2
2643	BAGS, EXCEPT TEXTILE BAGS . . . . .	11	6	.9	7.4	.7	1.4	4.6	15.7	18.2	33.7	(D)	1.7	14.2
2645	WIF-CUT PAPER AND BOARD . . . . .	14	5	.3	2.2	.2	.4	1.4	7.3	6.7	13.7	.1	.2	2.5
2648	STATIONERY PRODUCTS . . . . .	11	5	1.4	9.6	1.1	2.1	7.5	18.5	23.1	41.1	.2	(NA)	(NA)
265	PAPERBOARD CONTAINERS AND BOXES . . . . .	70	51	6.8	55.1	5.4	10.7	39.0	106.9	134.9	241.4	5.5	6.6	84.1
2653	CORRUGATED AND SOLID FIBER BOXES . . . . .	30	27	2.6	22.3	1.9	3.9	14.2	38.6	66.0	104.4	2.5	2.1	21.2
2654	SANITARY FOOD CONTAINERS . . . . .	7	7	2.3	17.1	1.9	3.6	12.9	38.7	37.7	76.2	1.7	2.5	41.3
27	PRINTING AND PUBLISHING . . . . .	1 141	233	33.8	310.6	17.9	34.5	159.0	641.5	316.5	939.3	66.6	32.2	436.7

See footnotes at end of table.



TABLE 3. General Statistics for the State, by Industry Groups and Industries: 1972 and 1967—Continued

(See appendix, Explanation of Terms)

Code	Industry	1972											1967	
		Establishments		All employees		Production workers			Value added by manufacture	Cost of materials <sup>1</sup>	Value of shipments <sup>1</sup>	Capital expenditures, new	All employees	Value added by manufacture
		Total	With 20 employees or more	Number	Payroll	Number	Man-hours	Wages						
		(number)	(number)	(1,000)	(million dollars)	(1,000)	(million)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(1,000)	(million dollars)
2711	NEWSPAPERS . . . . .	290	54	8.1	78.0	4.4	8.3	43.0	150.5	55.1	205.7	13.2	8.0	104.8
2721	PERIODICALS . . . . .	70	19	2.9	23.9	1.3	2.7	10.1	46.8	24.5	71.1	(D)	3.2	38.0
273	BOOKS . . . . .	31	15	1.8	15.7	.9	1.9	7.5	31.6	15.6	46.3	1.6	EE	(D)
2731	BOOK PUBLISHING . . . . .	15	5	.7	5.5	.1	.2	.7	19.4	9.5	28.7	.2	CC	(D)
2732	BOOK PRINTING . . . . .	16	10	1.1	10.2	.8	1.7	6.8	12.1	6.1	17.6	1.4	1.4	15.1
2741	MISCELLANEOUS PUBLISHING . . . . .	32	3	.6	4.0	.1	.2	.6	9.8	3.2	13.2	.3	88	(D)
275	COMMERCIAL PRINTING . . . . .	550	93	8.6	79.9	6.5	12.3	55.8	144.2	93.3	236.1	11.1	(NA)	(NA)
2751	COMMERCIAL PRINTING, LETTERPRESS . . . . .	324	29	2.9	23.8	2.3	4.3	17.3	39.5	28.5	67.6	2.4	(NA)	(NA)
2752	COMMERCIAL PRINTING, LITHOGRAPHIC . . . . .	212	61	5.5	56.5	4.1	7.7	37.3	101.6	63.8	164.5	8.7	(NA)	(NA)
2761	MANIFOLD BUSINESS FORMS . . . . .	19	11	.9	7.5	.6	1.3	4.9	14.1	9.5	22.7	(D)	.8	8.5
279	PRINTING TRADE SERVICES . . . . .	94	19	1.3	15.3	1.0	1.7	11.0	27.2	5.1	32.4	(D)	(NA)	(NA)
2791	TYPESETTING . . . . .	68	12	.7	8.0	.6	1.0	6.1	14.5	1.7	16.3	(D)	.6	7.3
2793	PHOTOENGRAVING . . . . .	12	4	.3	3.4	.2	.3	2.1	4.7	.8	5.6	(D)	88	(D)
28	CHEMICALS AND ALLIED PRODUCTS . . . . .	364	141	22.9	210.7	14.1	27.6	114.3	710.6	607.8	1 309.7	35.3	22.3	545.8
283	DRUGS . . . . .	49	21	5.0	40.3	2.7	5.2	18.0	166.9	117.5	278.8	8.1	3.4	107.0
2834	PHARMACEUTICAL PREPARATIONS . . . . .	36	15	2.6	26.1	1.6	3.0	11.1	121.8	62.0	181.0	4.9	2.6	91.8
284	SOAPS, CLEANERS, AND TOILET GOODS . . . . .	78	27	4.7	42.5	3.3	6.7	26.1	229.4	136.5	363.8	7.4	(NA)	(NA)
2841	SOAP AND OTHER DETERGENTS . . . . .	21	9	1.8	20.3	1.4	2.9	15.0	119.7	84.7	203.0	4.9	1.5	84.3
2844	TOILET PREPARATIONS . . . . .	14	5	1.4	9.0	1.2	2.4	6.5	70.2	21.0	91.0	(D)	EE	(D)
2851	PLANTS AND ALLIED PRODUCTS . . . . .	59	20	3.3	29.9	1.7	3.3	14.3	79.5	85.7	163.8	3.6	3.2	48.8
287	AGRICULTURAL CHEMICALS . . . . .	44	14	2.2	21.8	1.3	2.5	9.8	58.9	81.3	140.7	6.1	(NA)	(NA)
2879	AGRICULTURAL CHEMICALS . . . . .	21	6	1.1	11.9	.5	.9	3.6	37.2	41.0	78.2	1.9	(NA)	(NA)
289	MISCELLANEOUS CHEMICAL PRODUCTS . . . . .	71	29	2.6	26.2	1.4	2.9	12.3	69.8	58.1	127.1	(D)	(NA)	(NA)
2893	PRINTING INK . . . . .	15	7	.3	3.0	.2	.4	1.4	8.2	10.5	18.4	.7	3.3	5.2
2899	CHEMICAL PREPARATIONS, NEC . . . . .	37	10	1.1	11.8	.3	.7	2.8	33.1	26.4	59.3	(D)	(NA)	(NA)
299	MISC. PETROLEUM AND COAL PRODUCTS . . . . .	12	4	.3	2.4	.2	.4	1.5	18.1	22.7	40.3	.2	(NA)	(NA)
2992	LUBRICATING OILS AND GREASES . . . . .	12	4	.3	2.4	.2	.4	1.5	18.1	22.7	40.3	.2	(NA)	(NA)
30	RUBBER AND MISC. PLASTICS PROD . . . . .	183	91	9.6	69.1	8.0	15.8	51.0	163.0	124.3	284.3	14.2	(NA)	(NA)
3021	RUBBER AND PLASTICS FOOTWEAR . . . . .	4	3	.3	2.1	.3	.5	1.5	2.8	2.3	5.0	(D)	(NA)	(NA)
3079	MISCELLANEOUS PLASTICS PRODUCTS . . . . .	158	77	6.8	46.7	5.7	11.3	33.9	108.8	82.1	189.4	13.0	(NA)	(NA)
3131	BOOT, SHOE CUT STOCK, FINDINGS . . . . .	30	19	1.8	8.8	1.7	3.1	7.4	16.1	23.1	38.5	.5	EE	(D)
32	STONE, CLAY, AND GLASS PRODUCTS . . . . .	401	116	13.3	123.9	10.0	19.9	85.5	271.7	201.4	470.0	19.0	13.9	211.4
3241	CEMENT, HYDRAULIC . . . . .	7	7	1.2	14.1	1.0	1.8	10.8	55.9	35.1	89.1	3.0	1.3	38.4
325	STRUCTURAL CLAY PRODUCTS . . . . .	20	13	3.5	33.7	2.5	5.2	20.9	60.0	43.9	103.4	3.1	4.3	52.5
326	POTTERY AND RELATED PRODUCTS . . . . .	7	3	.3	1.9	.2	.5	1.3	4.2	2.0	6.3	.1	(NA)	(NA)
327	CONCRETE, GYPSUM, PLASTER PRODUCTS . . . . .	277	66	4.9	42.0	3.6	6.7	28.7	85.8	86.5	171.5	9.7	4.2	53.6
3271	CONCRETE BLOCK AND BRICK . . . . .	36	6	.4	3.4	.2	.5	1.8	6.7	8.3	15.1	1.6	88	(D)
3273	READY-MIXED CONCRETE . . . . .	157	40	2.4	21.4	1.6	2.9	14.2	42.5	56.4	98.7	4.5	2.2	27.0
329	MISC. NONMETALLIC MINERAL PRODUCTS . . . . .	51	14	1.4	12.6	1.1	2.4	9.5	26.4	18.4	44.0	1.2	(NA)	(NA)
3294	MINERALS, GROUND OR TREATED . . . . .	15	5	.3	2.7	.2	.5	2.1	7.9	4.1	11.8	.7	(NA)	(NA)
33	PRIMARY METAL INDUSTRIES . . . . .	125	73	15.4	144.3	12.3	24.5	108.4	355.1	442.4	791.8	15.1	14.7	216.3
331	BLAST FURNACE, BASIC STEEL PROD . . . . .	15	12	5.9	64.7	4.6	8.8	47.2	138.3	120.8	254.2	5.2	5.2	96.8
332	IRON AND STEEL FOUNDRIES . . . . .	27	20	3.4	26.7	2.9	5.7	21.7	44.1	26.5	70.4	2.4	4.7	49.3
3321	GRAY IRON FOUNDRIES . . . . .	15	11	1.6	11.7	1.4	2.6	9.4	23.0	16.0	37.9	.8	EE	(D)
333	PRIMARY NONFERROUS METALS . . . . .	5	4	1.5	14.8	1.2	2.4	11.4	65.0	75.9	134.9	(D)	88	(D)
335	NONFERROUS ROLLING AND DRAWING . . . . .	14	5	1.8	14.3	1.4	3.1	11.4	40.5	111.0	150.3	1.2	EE	(D)
336	NONFERROUS FOUNDRIES . . . . .	51	23	2.2	18.1	1.8	3.6	13.5	33.4	24.0	57.9	1.4	1.9	21.0
3361	ALUMINUM FOUNDRIES . . . . .	26	13	1.3	10.7	1.1	2.2	7.8	19.0	13.0	32.1	.8	1.1	11.2
3362	BRASS, BRONZE, AND COPPER FOUNDRIES . . . . .	11	4	.3	2.7	.2	.5	1.9	5.7	5.7	11.9	.3	.3	4.2
3369	NONFERROUS FOUNDRIES, NEC . . . . .	14	5	.6	4.8	.5	1.0	3.8	8.7	5.3	13.9	.4	.4	5.6
34	FABRICATED METAL PRODUCTS . . . . .	547	222	38.0	367.8	27.6	53.9	235.9	630.1	620.7	1 229.7	28.8	(NA)	(NA)
341	METAL CANS AND SHIPPING CONTAINERS . . . . .	15	12	3.4	40.2	3.0	6.3	34.1	97.1	150.8	248.5	7.1	(NA)	(NA)
342	CUTLERY, HANDTOOLS AND HARDWARE . . . . .	34	21	2.0	19.2	1.6	3.3	13.5	30.5	18.3	48.7	.6	2.3	27.2
3429	HARDWARE, NEC . . . . .	15	11	1.1	10.6	.9	1.8	6.9	17.4	13.1	30.6	.4	1.1	13.2
343	PLUMBING, HEATING, EXC. ELECTRIC . . . . .	14	6	1.6	15.8	1.0	1.7	6.3	25.3	48.9	71.8	(D)	(NA)	(NA)
344	FABRICATED STRUCTURAL METAL PROD . . . . .	217	83	10.4	97.5	7.6	15.3	64.9	183.3	190.8	367.2	10.5	10.5	133.6
3441	FABRICATED STRUCTURAL METAL PRODUCTS . . . . .	52	25	2.2	22.0	1.6	3.2	14.0	39.9	49.2	84.4	2.9	2.1	37.2
3442	METAL DOORS, SASH, AND TRIM . . . . .	37	17	1.7	11.6	1.3	2.5	7.6	21.0	23.5	44.3	1.2	2.1	16.0
3443	FABRICATED PLATEWORK (BOILERS SHOP) . . . . .	30	21	3.4	34.5	2.6	5.3	24.9	69.3	51.1	118.2	5.0	2.9	37.0
3444	SHEET METALWORK . . . . .	51	16	1.5	14.8	1.1	2.1	9.7	28.7	35.9	64.5	.6	3.0	38.5
346	METAL FORGINGS AND STAMPINGS . . . . .	53	25	2.1	19.1	1.7	3.4	14.0	32.8	30.0	61.8	3.0	(NA)	(NA)
3469	METAL STAMPINGS, NEC . . . . .	45	20	1.9	16.1	1.5	2.9	11.9	28.1	24.4	51.6	2.5	(NA)	(NA)
347	METAL SERVICES, NEC . . . . .	93	20	1.7	12.9	1.3	2.7	8.7	23.1	10.2	33.3	.8	EE	(D)
3471	PLATING AND POLISHING . . . . .	62	12	1.2	9.1	1.0	2.1	6.3	16.0	4.5	20.7	.5	1.0	10.2
3479	METAL COATING AND ALLIED SERVICES . . . . .	31	8	.4	3.8	.3	.7	2.5	7.1	5.6	12.6	.3	CC	(D)
349	MISC. FABRICATED METAL PRODUCTS . . . . .	90	34	5.1	42.6	3.8	7.6	28.3	69.7	72.0	143.4	3.4	(NA)	(NA)
3494	VALVES AND PIPE FITTINGS . . . . .	4	5	2.2	18.9	1.6	3.1	12.5	28.7	26.4	55.3	1.1	2.9	49.8

See footnotes at end of table.

TABLE 3. General Statistics for the State, by Industry Groups and Industries: 1972 and 1967—Continued

(See appendix, Explanation of Terms)

Code	Industry	1972											1967	
		Establishments		All employees		Production workers			Value added by manufacture	Cost of materials <sup>1</sup>	Value of shipments <sup>1</sup>	Capital expenditures, new	All employees	Value added by manufacture
		Total	With 20 employees or more	Number	Payroll	Number	Man-hours	Wages	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(1,000)	(million dollars)
		(number)	(number)	(1,000)	(million dollars)	(1,000)	(million)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(1,000)	(million dollars)
3495	WIRE SPRINGS . . . . .	4	3	.7	5.4	.6	1.1	3.8	6.8	10.2	16.3	.3	(NA)	(NA)
3496	MISC. FABRICATED WIRE PRODUCTS . . . .	22	8	.9	6.9	.7	1.4	4.4	12.5	9.0	21.4	1.2	(NA)	(NA)
3499	FABRICATED METAL PRODUCTS, NEC . . . .	44	12	.6	5.3	.5	1.0	3.4	10.4	11.7	23.2	.4	(NA)	(NA)
35	MACHINERY, EXCEPT ELECTRICAL. . . .	770	198	30.6	277.3	23.0	45.1	189.2	558.6	387.8	929.9	21.1	31.2	413.1
353	CONSTRUCTION AND RELATED MACHINERY	50	23	2.8	26.8	1.7	3.3	14.1	56.3	43.7	96.2	2.2	2.3	29.4
354	METALWORKING MACHINERY . . . . .	162	41	4.1	40.6	3.2	6.2	27.8	76.5	35.9	111.0	3.5	4.1	57.1
3541	MACHINE TOOLS, METAL CUTTING TYPES . .	9	4	.5	5.6	.3	.7	3.9	9.7	4.2	14.0	.2	BB	(D)
3544	SPECIAL DIES, TOOLS, JIGS, FIXTURES	131	24	1.7	18.1	1.4	2.8	13.9	29.0	10.8	39.4	1.3	1.9	24.9
355	SPECIAL INDUSTRY MACHINERY . . . . .	64	20	1.4	12.8	.9	1.9	7.2	25.1	14.6	39.1	.6	2.0	26.1
3551	FOOD PRODUCTS MACHINERY. . . . .	21	9	.7	7.0	.4	.8	3.7	12.7	7.1	18.9	.2	1.0	15.0
3555	PRINTING TRADES MACHINERY. . . . .	10	6	.4	3.2	.2	.6	1.8	7.3	3.8	11.2	.2	.7	6.5
356	GENERAL INDUSTRIAL MACHINERY . . . .	70	24	3.5	31.3	2.5	4.7	21.2	46.3	38.1	85.3	3.3	EE	(D)
358	REFRIGERATION, SERVICE MACHINERY.	39	24	8.8	76.1	6.5	13.0	51.5	163.3	124.5	282.2	3.9	8.1	107.3
3589	SERVICE INDUSTRY MACHINERY, NEC. . .	17	8	.6	4.6	.4	.8	2.8	6.6	6.9	13.7	.4	CC	(D)
359	MISC. MACHINERY, EXCEPT ELECTRICAL	318	39	6.7	61.7	5.5	10.8	47.6	107.1	50.5	156.7	4.9	(NA)	(NA)
36	ELECTRIC, ELECTRONIC EQUIPMENT.	189	111	33.3	267.9	25.8	51.1	180.9	562.3	598.5	1 160.7	26.6	(NA)	(NA)
362	ELECTRICAL INDUSTRIAL APPARATUS. . .	20	17	3.9	29.0	3.2	6.1	22.6	50.6	43.3	92.3	3.8	4.5	39.3
3621	MOTORS AND GENERATORS. . . . .	9	8	3.4	24.5	2.8	5.4	20.1	42.5	35.2	76.4	3.5	3.6	30.9
3623	WELDING APPARATUS, ELECTRIC. . . . .	7	4	.3	3.3	.2	.5	1.8	5.1	6.2	11.3	.2	.3	4.1
363	HOUSEHOLD APPLIANCES . . . . .	13	13	3.9	21.6	3.5	7.1	16.8	51.2	62.9	117.6	3.3	4.2	41.0
364	ELECT. LIGHTING AND WIRING EQUIP. . .	39	25	5.2	43.5	3.8	7.5	26.5	109.6	76.8	184.1	4.9	4.7	72.2
3645	RESIDENTIAL LIGHTING FIXTURES. . . . .	7	6	.4	3.0	.3	.6	1.9	5.3	4.0	9.1	.1	(NA)	(NA)
366	COMMUNICATION EQUIPMENT. . . . .	23	13	8.1	84.1	4.9	9.1	43.3	179.9	92.0	270.7	10.0	FF	(D)
367	ELECTRONIC COMPONENTS AND ACCESS. .	23	13	1.5	9.0	1.3	2.6	6.1	16.8	9.1	26.0	1.0	1.8	13.8
3694	ENGINE ELECTRICAL EQUIPMENT. . . . .	9	6	.3	2.1	.3	.5	1.3	6.0	8.5	14.2	.3	(NA)	(NA)
37	TRANSPORTATION EQUIPMENT . . . . .	190	83	69.7	810.9	47.5	97.1	492.1	2 023.2	3 572.8	5 479.0	32.9	(NA)	(NA)
3714	MOTOR VEHICLE PARTS AND ACCESSORIES.	47	23	5.8	45.2	4.8	9.7	32.5	109.6	102.0	208.4	5.3	6.2	47.7
3728	AIRCRAFT EQUIPMENT, NEC. . . . .	12	6	.4	3.1	.2	.5	2.2	6.6	2.8	8.9	.1	(NA)	(NA)
373	SHIP, BOAT BUILDING, REPAIRING . . . .	34	12	2.1	16.1	1.5	3.1	11.2	21.5	28.0	49.4	1.0	1.7	20.8
379	MISC. TRANSPORTATION EQUIPMENT . . .	39	12	1.3	7.9	1.1	2.1	6.3	14.8	21.6	35.9	.8	(NA)	(NA)
382	MEASURING AND CONTROLLING DEVICES.	15	6	1.5	15.3	.8	1.5	6.5	39.3	20.2	57.5	.4	(NA)	(NA)
384	MEDICAL INSTRUMENTS AND SUPPLIES . .	30	10	1.7	11.4	1.2	2.3	6.7	17.9	18.7	35.8	.8	1.3	13.8
39	MISC. MANUFACTURING INDUSTRIES . . .	284	80	7.8	48.7	6.4	12.1	33.5	101.6	76.9	177.4	5.8	6.8	62.7
394	TOYS AND SPORTING GOODS. . . . .	71	23	2.5	14.2	2.2	4.3	10.6	32.4	31.7	63.4	1.8	1.8	15.8
3944	GAMES, TOYS, AND CHILDREN'S VEHICLES	11	6	.6	4.1	.5	1.1	2.7	11.1	9.8	20.5	.6	(NA)	(NA)
3949	SPORTING AND ATHLETIC GOODS, NEC . . .	43	13	1.5	8.3	1.3	2.4	6.4	17.4	17.2	34.3	1.0	.8	8.9
395	PENS, PENCILS, OFFICE, ART GOODS . . .	23	9	1.1	7.1	.8	1.5	4.5	14.0	9.5	23.4	(D)	.9	9.3
399	MISCELLANEOUS MANUFACTURES . . . . .	160	44	3.7	23.9	3.0	5.5	16.1	47.5	30.3	77.3	3.1	3.6	33.0
3993	SIGNS AND ADVERTISING DISPLAYS . . . .	84	27	1.8	13.5	1.4	2.5	8.8	23.1	16.5	39.4	1.5	1.6	15.9
3995	FURIAL CASKETS . . . . .	8	0	.4	2.5	.4	.7	2.0	4.1	5.2	9.2	.1	(NA)	(NA)
3999	MANUFACTURING INDUSTRIES, NEC. . . .	70	15	1.4	7.7	1.2	2.4	5.2	19.9	8.3	28.0	1.5	1.4	11.5
--	ADMINISTRATIVE AND AUXILIARY . . . .	229	120	27.4	349.6	-	-	-	-	-	-	-	21.4	-

Note: The following symbols indicate employment size range for 1967:

AA less than 250 employees      EE 1,000 to 2,499 employees  
BB 250 to 499 employees      FF 2,500 employees and over  
CC 500 to 999 employees

- Represents zero. (NA) Not available. Because of a revision to this industry or industry group in the 1972 edition of the SIC manual, 1967 census data are not available on a comparable basis. (D) Withheld to avoid disclosing figures for individual companies.

<sup>1</sup>The total cost of materials and value of shipments for industry groups shown may include extensive duplication arising from shipments between establishments in the same industry classification. (For a more complete explanation, see appendix.)

<sup>2</sup>Includes figures for industry groups which have been withheld from publication in order to (a) avoid disclosing figures for individual companies or (b) permit further checking of figures for smaller industry groups. Additional detail will appear in the final report for this State.



## Appendix A. SCOPE AND COVERAGE

This report is one of a series presenting preliminary information, by State, from the 1972 Census of Manufactures. The data will be superseded in a final report which, in turn, will be included in *Volume III, Area Statistics, 1972 Census of Manufactures*. The final report will include a comprehensive discussion of the concepts and definitions used in the census.

The census of manufactures covers each manufacturing establishment in the United States with one paid employee or more; manufacturing establishments with no employees are excluded. Firms which operated more than one establishment were required to file a separate report for each location. Companies which engaged in distinctly different lines of activity at one location were asked to submit separate reports if the company records permitted such a separation and the activities were of significant size.

This report includes figures for administrative offices, warehouses, garages, or other auxiliary units which service manufacturing establishments.

In the 1972 census, the approximately 120,000 manufacturing establishments with fewer than 10 employees were excused from filing reports. Under special arrangements which safeguarded the confidentiality of both tax and census records, data on payrolls, sales, and industry classification from the administrative records of the Social Security Administration and the Internal Revenue Service were made available to the Census Bureau for use in the 1972 Economic Censuses (retail and wholesale trade, service industries, construction industries, manufactures, and mineral industries). Estimates for data other than payrolls and sales for these small establishments were constructed from industry averages. The effect on industry aggregates is slight in most industries. For manufacturing as a whole, these small establishments account for less than 3 percent of the payrolls and value added.

Establishments are classified by industry in accordance with industry definitions described in the 1972 edition of the Standard Industrial Classification (SIC) Manual. For 1972, the SIC was significantly revised and the comparability with prior year's data for some industries was significantly affected. The comparability at the 2- and 3-digit SIC levels was less affected. The final volumes of the 1972 Census of Manufactures will contain a table relating aggregates based on the 1972 SIC with aggregates derived from classifying establishments according to the 1967 SIC definitions.

As in earlier censuses, a number of small establishments may have been misclassified as to industry. However, such possible misclassifications have significant effect on *none* of the statistics except the number of establishments. As indicated above, report forms were not mailed to very small establishments (fewer than 10 employees). The industry classifications for these establishments were assigned on the basis of brief descriptions of the general activity of the establishment. Where the description is incomplete or there are relatively fine lines of demarcation among industries or between manufacturing and nonmanufacturing activity, the code assigned to an establishment could differ from that which would have been assigned on the basis of more complete product information. Therefore, the total establishment count for individual industries should be viewed as an approximation rather than a precise measurement. The counts for establishments with 20 employees or more are more reliable than the total number of establishments.

More detailed figures for this State will appear in the final census reports. Final reports will also include a comprehensive discussion of such concepts as "industry" and "establishment," as well as the various statistical items such as "employment," "value of shipments," and "value added." Similar preliminary and final reports will be issued for other States during the coming months. A series of preliminary summary reports showing U.S. totals for each manufacturing industry and for each State are being issued. Final industry reports and final area reports will be published during 1974.

Order forms describing the individual reports and listing their prices may be obtained from any U.S. Department of Commerce district office or from the Publications Distribution Section, Social and Economic Statistics Administration, Washington, D.C. 20233.

The 1972 Census of Manufactures is the 29th census of manufacturing establishments in the United States. For 1972, it was conducted jointly with the censuses of mineral industries, construction industries, retail trade, wholesale trade, and selected services under authority of Title 13 of the United States Code. Title 13 specifies that a census of manufactures be conducted every 5 years and, as amended, to cover years ending in "2" and "7". Title 13 also authorizes an annual sample survey of manufacturing establishments in interim years.



## Appendix B. EXPLANATION OF TERMS

*(For a more complete discussion of these terms and the method of compiling the Census of Manufactures, see the "Introduction" to the 1967 Census of Manufactures, Volume III).*

**All Employees**—All full-time and part-time employees on the payrolls of operating manufacturing establishments for any part of the pay period ending nearest the 12th of the months specified on the report form. Included are all persons on paid sick leave, paid holidays, and paid vacations during these pay periods. Officers of corporations are included as employees; proprietors and partners of unincorporated firms are excluded. The "all employee" number is the average number of production workers for the midmonth payroll period of March, May, August, and November plus the number of nonproduction employees in mid-March.

**Number of Production Workers**—Workers (up through the working foreman level) engaged in fabricating, processing, assembling, inspecting, receiving, packing, warehousing, shipping (but not delivering), and maintenance, repair, janitorial, and watchman services, product development, auxiliary production for plant's own use (e.g., powerplant), recordkeeping, and other closely associated services. Proprietors and partners are excluded.

**Payroll**—This item includes all forms of compensation such as salaries, wages, commissions, dismissal pay, bonuses, vacation and sick leave pay, and compensation in kind, prior to such deductions as employees' Social Security contributions, withholding taxes, group insurance, union dues, and savings bonds. The total includes salaries of officers of these establishments, if a corporation; it excludes payments to the proprietor or partners, if an unincorporated concern. Respondents were told that in reporting they could follow the definition of payrolls used for calculating the Federal withholding tax.

**Man-Hours of Production Workers**—This total relates to production-worker man-hours worked or paid for at the plant including actual overtime hours (not straight-time equivalent hours). It excludes hours paid for vacation, holidays, or sick leave when the employee was not at the plant.

**Cost of Materials**—The term "Cost of Materials" refers to charges actually paid or payable for items consumed or put into production during the year, including freight and other direct charges incurred by the establishment in acquiring these materials. It includes the cost of materials or fuel consumed regardless of

whether these items were purchased by the establishment from other companies, transferred to it from other establishments of the same company, or withdrawn from inventory during the year. The establishment was requested to value materials transferred from other parts of the company at its approximate market value, not at cost of production. The important components of this cost item are (a) all raw materials, semifinished goods, parts, components, containers, scrap, and supplies put into production or used as operating supplies and for repair and maintenance during the year; (b) electric energy purchased; (c) fuels consumed for heat, power, or the generation of electricity; (d) work done by others on materials or parts furnished by manufacturing establishments (contract work); and (e) products bought and resold in the same condition.

**Value of Shipments**—The value of shipments is the received or receivable net selling value, f.o.b. plant (exclusive of freight and taxes), of all products shipped, both primary and secondary, as well as all miscellaneous receipts such as receipts for contract work performed for others, installation and repair, sales of scrap, and sale of products bought and resold without further processing. Included are all items made by the establishment or for it under contract from materials owned by it whether sold, transferred to other plants of the same company, or shipped on consignment. The net selling value of products made in one plant on a contract basis from materials owned by another was reported by the plant providing the materials.

In the case of multiunit companies, the manufacturer was requested to report the value of products transferred to other establishments of the same company at full economic value; i.e., to include not only the direct costs of production but also a reasonable proportion of "all other costs" (including company overhead) and profit.

**Duplication in Cost of Materials and Value of Products**—The aggregate cost of materials and value-of-shipments figures for industry groups and for all manufacturing industries may include large amounts of duplication since the products of some industries are used as materials by others. With some important exceptions, such as motor vehicles and parts, this duplication is not significant within individual industries but arises from the addition of the totals of related industries in successive stages of the production of a finished manufactured product. Examples are the addition of flour mills to bakeries in the food group and the addition of pulp mills to paper mills in the paper and allied products group of industries. Esti-



mates of this duplication indicate that the value of manufactured products exclusive of such duplication—the value of finished manufactures—approximates two-thirds of the total value of products.

Prior to 1962, the Bureau of the Census did not publish figures for cost of materials or value of shipments if they contained significant duplication. Effective with the 1962 annual survey these figures were shown at all industry levels for the United States to meet the requests for their use in studies in which the presence of an indeterminate amount of duplication is not a limiting factor. However, they are appropriately footnoted. Effective with the 1964 annual survey, these industry group totals are also shown at the State, standard metropolitan statistical area, and large-county level.

Even where there is no significant amount of duplication, value-of-shipments figures are deficient as measures of the relative economic importance of individual manufacturing industries or geographic areas because of the wide variation in ratio of materials, labor, and other processing costs to value of shipments among industries.

**Value Added by Manufacture**—This measure of manufacturing activity is derived by subtracting the cost of materials, supplies, containers, fuel, purchased electricity, and cost of resale contract work from the value of shipments for products manufactured plus resale and receipts for services rendered. The result of this calculation is adjusted by the net change in finished goods and work-in-process inventories between the beginning and end of the year. (In the few industries that report value of production rather than value of shipments, only changes in work-in-process inventories are used to adjust value added. In the shipbuilding and repairing industry, no inventory adjustment is made.)

“Value added” avoids the duplication in the value of shipments figure which results from the use of products of some establishments as materials by others. Value added is considered to be the best value measure available for comparing the relative economic importance of manufacturing among industries and geographic areas.

**Expenditures for Plant and Equipment**—Manufacturing establishments in operation and establishments under construction but not yet in operation, were asked to report their expenditures for (a) permanent additions and major alterations to the manufacturing establishment, and (b) new machinery and equipment used for replacement purposes and additions to plant capacity if they are of the type for which depreciation accounts are ordinarily maintained.

These totals exclude expenditures for new facilities and equipment leased from nonmanufacturing concerns; new facilities owned by the Federal Government but operated under contract by private companies; and plant and equipment furnished to the manufacturer by communities and nonprofit organizations. Expenditures for used plant and equipment (although reported in the census), expenditures for land, and cost of maintenance and repairs charged as current operating expense are also omitted from the figures for new capital expenditures.

**Central Administrative Offices and Auxiliary Units**—In the 1972 census as in previous years, respondents were asked to file separate reports for central administrative offices or auxiliary units which were (1) at different locations from the establishments served or, (2) at the same location as one of these establishments but were not operated as an integral part thereof and served two or more establishments. The functions of employees in central administrative offices include general company policy determination, planning and management (that is, company purchasing, accounting, general engineering, direction of company personnel matters, and legal and patent matters). Auxiliaries are, storage facilities, garages, repair shops, purchasing offices, sales promotion offices, and research laboratories serving the plants or central management of the company.

**Standard Metropolitan Statistical Areas**—Standard metropolitan statistical areas (SMSA) are integrated economic and social units with a large volume of daily travel and communication between the central city and outlying parts of the area.<sup>1</sup> Each area (except in New England) consists of one whole county or more. An area may contain not only highly industrialized counties but also adjoining counties which, though primarily residential in character, contribute significantly to the industrial counties' labor force and are socially and economically integrated with the central city. These areas are defined by the Federal Committee on Standard Metropolitan Statistical Areas of the Office of Management and Budget for general-purpose use throughout the Federal Government in presenting economic and social data. In the New England States, similar intergration criteria are applied in defining

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<sup>1</sup> Each standard metropolitan statistical area must include either (1) a city with 50,000 or more inhabitants, or (2) a city having a population of at least 25,000 which (a) with the addition of the population of contiguous places has a population density of at least 1,000 persons per square mile; (b) constitutes, for general economic and social purposes, a single community with a combined population of at least 50,000; and (c) includes a total population of at least 75,000 in the county or counties in which the city and contiguous places are located.

SMSA's on a city and town basis because towns rather than counties are regarded as the significant unit in this region of the country.

The requirement that each SMSA consist of county units (except in New England) sometimes results in the inclusion in an area of considerable amount of territory which would not ordinarily be considered "metropolitan," much less "industrial." It is recognized that metropolitan areas could be more accurately defined in terms of smaller area segments such as minor civil

divisions, but the usefulness of areas so defined would be limited by the fact that many types of economic and social data are available only on a county basis.

Each SMSA is designated by the name of the principal city of the area. In addition to the name of the principal city, the area title may include one or two additional city names.

The data for SMSA's which changed definition since the 1967 census have not been retabulated on the new basis for years prior to 1972.



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C72(P)-S27

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U. S. DEPARTMENT OF COMMERCE • Social and Economic Statistics Administration • BUREAU OF THE CENSUS

**Montana**

Value added by manufacturing in 1972 in the State of Montana amounted to \$458 million, a 38-percent increase from 1971 and a 47-percent increase from 1967.

This report presents preliminary results from the 1972 Census of Manufactures for the State, its Standard Metropolitan Statistical Areas, and its counties.

Data are provided for industry groups within the State. Historical data, back to 1958, are included for the State as a whole,

and 1967 figures on employment and value added are provided for the smaller areas.

The figures in this report have been subjected to only preliminary review and must be regarded as approximations of the final census figures. No adjustments have been made in the value figures for changes in price level.

For an explanation of the terms used in the tables, see the appendix at the end of this report.

TABLE 1. General Statistics for the State: 1972 and Earlier Years

(See appendix, Explanation of Terms)

Year	Establishments		All employees <sup>1</sup>		Production workers			Value added by manufacture	Cost of materials <sup>2</sup>	Value of shipments <sup>2</sup>	Capital expenditures, new
	Total (number)	With 20 employees or more (number)	Number (1,000)	Payroll (million dollars)	Number (1,000)	Man-hours (millions)	Wages (million dollars)	(million dollars)	(million dollars)	(million dollars)	(million dollars)
MONTANA											
1972 Census .....	925	199	21.1	182.0	16.7	33.2	136.8	457.5	1,122.9	1,583.6	75.4
1971 ASM .....	(NA)	(NA)	19.9	158.5	15.4	30.9	118.8	330.4	882.2	1,232.0	50.4
1970 ASM .....	(NA)	(NA)	20.1	151.6	15.8	31.6	114.3	357.1	896.0	1,217.3	42.3
1969 ASM .....	(NA)	(NA)	22.1	155.5	17.8	35.3	118.7	359.1	889.2	1,256.3	26.3
1968 ASM .....	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
1967 Census .....	923	191	20.4	129.5	16.1	32.1	96.4	311.6	660.2	967.3	68.9
1966 ASM .....	(NA)	(NA)	21.9	132.3	17.2	33.3	98.3	304.2	797.4	1,093.5	31.3
1965 ASM .....	(NA)	(NA)	20.9	122.8	16.6	32.9	91.9	280.3	721.3	997.9	31.2
1964 ASM .....	(NA)	(NA)	20.4	115.9	16.3	33.0	88.6	273.8	658.0	935.1	41.9
1963 Census .....	976	188	20.2	109.3	16.0	31.7	82.8	236.2	(NA)	(NA)	38.6
1962 ASM .....	(NA)	(NA)	19.0	102.2	15.0	29.8	75.5	229.1	(NA)	(NA)	23.4
1961 ASM .....	(NA)	(NA)	19.2	101.3	15.1	29.6	73.9	212.6	(NA)	(NA)	18.2
1960 ASM .....	(NA)	(NA)	20.2	100.3	16.0	30.2	73.8	205.6	(NA)	(NA)	17.7
1959 ASM .....	(NA)	(NA)	19.4	93.7	15.9	29.5	70.8	218.0	(NA)	(NA)	16.0
1958 Census .....	929	174	20.3	94.8	15.8	30.2	70.4	191.2	(NA)	(NA)	19.9

Note: "ASM" data are based on a representative sample of manufacturing establishments canvassed in the Annual Survey of Manufactures. These estimates may differ from the results of a complete canvass of all manufacturing establishments. The standard errors associated with these estimates are published in the annual survey of manufactures volumes for this period.

(NA) Not available.

<sup>1</sup>Includes employment and payroll at central administrative offices and auxiliary units. (For a definition of these units, see appendix.)

<sup>2</sup>The total cost of materials and value of shipments may include extensive duplication arising from shipments between establishments in the same industry classification. (For a more complete explanation, see appendix.)

TABLE 2. General Statistics for the State, Standard Metropolitan Statistical Areas, and Counties: 1972 and 1967

(See appendix, Explanation of Terms)

State, standard metropolitan statistical areas, and counties <sup>1</sup>	1972											1967	
	Establishments		All employees <sup>2</sup>		Production workers			Value added by manufacture	Cost of materials <sup>3</sup>	Value of shipments <sup>3</sup>	Capital expenditures, new	All employees	Value added by manufacture
	Total	With 20 employees or more	Number	Payroll	Number	Man-hours	Wages						
	(number)	(number)	(1,000)	(million dollars)	(1,000)	(million)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(1,000)	(million dollars)
MONTANA, TOTAL . . . . .	925	199	21.1	182.0	16.7	33.2	136.0	457.5	1 122.9	1 583.6	75.4	20.4	311.6
STANDARD METROPOLITAN STATISTICAL AREAS <sup>4</sup>													
BILLINGS . . . . .	105	32	3.2	30.8	2.2	4.4	19.2	87.0	292.6	378.3	9.9	2.7	71.8
GREAT FALLS . . . . .	63	23	2.5	21.1	1.8	3.3	14.5	57.5	307.9	369.6	2.6	2.5	45.3
COUNTIES													
CASCADE . . . . .	63	23	2.5	21.1	1.8	3.3	14.5	57.5	307.9	369.6	2.6	2.5	45.3
FLATHEAD . . . . .	123	27	3.1	25.4	2.7	5.2	20.8	47.2	98.3	145.8	6.8	2.6	41.8
GALLATIN . . . . .	62	13	.9	7.1	.7	1.2	5.2	18.4	13.5	32.3	9.3	.7	8.0
LAKE . . . . .	22	5	.5	4.2	.5	1.0	3.7	6.2	14.8	21.1	.2	.7	6.3
LEWIS AND CLARK . . . . .	34	10	.7	6.3	.5	1.0	4.2	14.5	87.7	100.8	1.1	.7	13.6
LINCOLN . . . . .	64	10	1.4	14.0	1.3	3.1	12.5	28.0	21.4	49.9	1.1	1.7	16.5
MISSOULA . . . . .	80	18	2.8	25.9	2.2	4.3	19.0	68.1	63.7	131.4	16.3	3.5	52.7
RAVALLI . . . . .	34	8	.5	3.8	.4	.8	3.0	10.8	7.5	17.7	.6	.4	3.3
SANDERS . . . . .	32	8	.7	5.8	.7	1.3	5.4	13.2	13.8	26.2	1.0	.5	4.9
SILVER ROW . . . . .	34	5	.6	5.1	.4	.8	3.2	11.6	15.3	27.2	.4	.5	11.5
YELLOWSTONE . . . . .	105	32	3.2	30.8	2.2	4.4	19.2	87.0	292.6	378.3	9.9	2.7	71.8

<sup>1</sup>Some counties were withheld from publication in order to (a) avoid disclosing figures for individual companies or (b) permit further checking of the figures for smaller counties. Additional detail will appear in the final report for this State.

<sup>2</sup>Includes employment and payroll at central administrative offices and auxiliary units. (For a definition of these units, see appendix.)

<sup>3</sup>The total cost of materials and value of shipments may include extensive duplication arising from shipments between establishments in the same industry classification. For a more complete explanation, see appendix.)

<sup>4</sup>The standard metropolitan statistical areas in this State are defined as follows:

BILLINGS SMSA: Coextensive with Yellowstone County, MT.  
GREAT FALLS SMSA: Coextensive with Cascade County, MT.

TABLE 3. General Statistics for the State, by Industry Groups and Industries: 1972 and 1967

(See appendix, Explanation of Terms)

Code	Industry	1972											1967	
		Establishments		All employees		Production workers			Value added by manufacture	Cost of materials <sup>1</sup>	Value of shipments <sup>1</sup>	Capital expenditures, new	All employees	Value added by manufacture
		Total	With 20 employees or more	Number	Payroll	Number	Man-hours	Wages						
		(number)	(number)	(1,000)	(million dollars)	(1,000)	(million)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(1,000)	(million dollars)
	ALL INDUSTRIES, TOTAL <sup>2</sup> . . . . .	925	199	21.1	182.0	16.7	33.2	136.0	457.5	1 122.9	1 583.6	75.4	20.4	311.6
20	FOOD AND KINDRED PRODUCTS . . . . .	147	41	3.3	27.7	2.1	4.4	16.9	64.6	191.3	254.6	6.9	3.7	55.2
201	MEAT PRODUCTS . . . . .	25	6	.8	8.0	.7	1.3	5.9	14.1	93.1	106.5	2.9	.8	12.8
202	DAIRY PRODUCTS . . . . .	43	15	.8	5.8	.3	.7	2.6	11.5	31.5	43.0	.5	.9	10.7
2026	FLUID MILK . . . . .	27	13	.6	5.1	.2	.5	2.1	9.8	25.2	34.9	.4	.7	9.1
204	GRAIN MILL PRODUCTS . . . . .	22	8	.4	3.2	.3	.6	2.1	12.2	27.6	39.6	.5	.3	7.2
208	BEVERAGES . . . . .	20	3	.3	2.1	.1	.3	.8	5.2	7.0	12.1	.5	.4	4.7
24	LUMBER AND WOOD PRODUCTS . . . . .	384	79	8.2	67.8	7.4	15.0	58.1	147.7	150.5	296.9	15.9	8.4	85.3
2411	LOGGING CAMPS, LOGGING CONTRACTORS . . . . .	224	21	1.7	10.2	1.6	2.9	9.1	21.5	20.5	41.7	2.2	1.6	16.9
242	SAWMILLS AND PLANING MILLS . . . . .	118	42	4.6	41.8	4.2	8.9	36.2	89.9	90.9	179.3	6.0	5.3	53.3
243	MILLWORK, PLYWOOD, STRUC. MEMBERS . . . . .	21	7	1.4	11.8	1.2	2.4	9.9	27.2	29.9	57.5	5.8	1.3	13.3
2431	MILLWORK . . . . .	9	2	.3	2.7	.3	.6	2.2	4.2	4.9	9.1	.5	(NA)	(NA)
27	PRINTING AND PUBLISHING . . . . .	106	17	1.4	11.1	.8	1.4	6.2	23.7	7.0	30.5	1.4	1.5	16.4
2711	NEWSPAPERS . . . . .	54	10	1.0	8.0	.5	.9	4.1	17.3	3.8	21.2	1.1	1.3	13.9
275	COMMERCIAL PRINTING . . . . .	53	5	.3	2.3	.2	.4	1.6	4.3	2.5	6.7	.3	.2	2.3
28	CHEMICALS AND ALLIED PRODUCTS . . . . .	17	6	.4	3.7	.3	.6	2.3	9.7	14.9	24.5	(D)	.3	8.2
281	INDUSTRIAL INORGANIC CHEMICALS . . . . .	7	4	.3	3.0	.2	.5	1.8	7.9	10.6	18.6	(D)	.3	7.4
29	PETROLEUM AND COAL PRODUCTS . . . . .	4	5	.9	10.6	.6	1.2	7.2	43.5	190.2	233.5	6.0	.8	43.5
32	STONE, CLAY, AND GLASS PRODUCTS . . . . .	79	12	.9	8.4	.7	1.6	6.5	24.8	16.6	41.8	9.3	.9	14.3
3273	READY-MIXED CONCRETE . . . . .	47	3	.4	3.2	.3	.6	2.5	8.0	6.8	14.8	.9	.3	3.6
34	FABRICATED METAL PRODUCTS . . . . .	24	9	.5	3.5	.3	.6	2.3	5.2	8.2	13.9	.2	.4	3.5
344	FABRICATED STRUCTURAL METAL PROD . . . . .	10	2	.3	2.4	.2	.4	1.5	3.9	6.5	10.3	(D)	.2	2.6
39	MISC. MANUFACTURING INDUSTRIES . . . . .	27	4	.4	1.8	.4	.7	1.3	2.8	1.0	3.8	.6	.3	1.5

(NA) Not available. (D) Withheld to avoid disclosing figures for individual companies.

<sup>1</sup>The total cost of materials and value of shipments for industry groups shown may include extensive duplication arising from shipments between establishments in the same industry classification. (For a more complete explanation, see appendix.)

<sup>2</sup>Includes figures for industry groups which have been withheld from publication in order to (a) avoid disclosing figures for individual companies or (b) permit further checking of figures for smaller industry groups. Additional detail will appear in the final report for this State.



## Appendix A. SCOPE AND COVERAGE

This report is one of a series presenting preliminary information, by State, from the 1972 Census of Manufactures. The data will be superseded in a final report which, in turn, will be included in *Volume III, Area Statistics, 1972 Census of Manufactures*. The final report will include a comprehensive discussion of the concepts and definitions used in the census.

The census of manufactures covers each manufacturing establishment in the United States with one paid employee or more; manufacturing establishments with no employees are excluded. Firms which operated more than one establishment were required to file a separate report for each location. Companies which engaged in distinctly different lines of activity at one location were asked to submit separate reports if the company records permitted such a separation and the activities were of significant size.

This report includes figures for administrative offices, warehouses, garages, or other auxiliary units which service manufacturing establishments.

In the 1972 census, the approximately 120,000 manufacturing establishments with fewer than 10 employees were excused from filing reports. Under special arrangements which safeguarded the confidentiality of both tax and census records, data on payrolls, sales, and industry classification from the administrative records of the Social Security Administration and the Internal Revenue Service were made available to the Census Bureau for use in the 1972 Economic Censuses (retail and wholesale trade, service industries, construction industries, manufactures, and mineral industries). Estimates for data other than payrolls and sales for these small establishments were constructed from industry averages. The effect on industry aggregates is slight in most industries. For manufacturing as a whole, these small establishments account for less than 3 percent of the payrolls and value added.

Establishments are classified by industry in accordance with industry definitions described in the 1972 edition of the Standard Industrial Classification (SIC) Manual. For 1972, the SIC was significantly revised and the comparability with prior year's data for some industries was significantly affected. The comparability at the 2- and 3-digit SIC levels was less affected. The final volumes of the 1972 Census of Manufactures will contain a table relating aggregates based on the 1972 SIC with aggregates derived from classifying establishments according to the 1967 SIC definitions.

As in earlier censuses, a number of small establishments may have been misclassified as to industry. However, such possible misclassifications have significant effect on *none* of the statistics except the number of establishments. As indicated above, report forms were not mailed to very small establishments (fewer than 10 employees). The industry classifications for these establishments were assigned on the basis of brief descriptions of the general activity of the establishment. Where the description is incomplete or there are relatively fine lines of demarcation among industries or between manufacturing and nonmanufacturing activity, the code assigned to an establishment could differ from that which would have been assigned on the basis of more complete product information. Therefore, the total establishment count for individual industries should be viewed as an approximation rather than a precise measurement. The counts for establishments with 20 employees or more are more reliable than the total number of establishments.

More detailed figures for this State will appear in the final census reports. Final reports will also include a comprehensive discussion of such concepts as "industry" and "establishment," as well as the various statistical items such as "employment," "value of shipments," and "value added." Similar preliminary and final reports will be issued for other States during the coming months. A series of preliminary summary reports showing U.S. totals for each manufacturing industry and for each State are being issued. Final industry reports and final area reports will be published during 1974.

Order forms describing the individual reports and listing their prices may be obtained from any U.S. Department of Commerce district office or from the Publications Distribution Section, Social and Economic Statistics Administration, Washington, D.C. 20233.

The 1972 Census of Manufactures is the 29th census of manufacturing establishments in the United States. For 1972, it was conducted jointly with the censuses of mineral industries, construction industries, retail trade, wholesale trade, and selected services under authority of Title 13 of the United States Code. Title 13 specifies that a census of manufactures be conducted every 5 years and, as amended, to cover years ending in "2" and "7". Title 13 also authorizes an annual sample survey of manufacturing establishments in interim years.



## Appendix B. EXPLANATION OF TERMS

*(For a more complete discussion of these terms and the method of compiling the Census of Manufactures, see the "Introduction" to the 1967 Census of Manufactures, Volume III).*

**All Employees**—All full-time and part-time employees on the payrolls of operating manufacturing establishments for any part of the pay period ending nearest the 12th of the months specified on the report form. Included are all persons on paid sick leave, paid holidays, and paid vacations during these pay periods. Officers of corporations are included as employees; proprietors and partners of unincorporated firms are excluded. The "all employee" number is the average number of production workers for the midmonth payroll period of March, May, August, and November plus the number of nonproduction employees in mid-March.

**Number of Production Workers**—Workers (up through the working foreman level) engaged in fabricating, processing, assembling, inspecting, receiving, packing, warehousing, shipping (but not delivering), and maintenance, repair, janitorial, and watchman services, product development, auxiliary production for plant's own use (e.g., powerplant), recordkeeping, and other closely associated services. Proprietors and partners are excluded.

**Payroll**—This item includes all forms of compensation such as salaries, wages, commissions, dismissal pay, bonuses, vacation and sick leave pay, and compensation in kind, prior to such deductions as employees' Social Security contributions, withholding taxes, group insurance, union dues, and savings bonds. The total includes salaries of officers of these establishments, if a corporation; it excludes payments to the proprietor or partners, if an unincorporated concern. Respondents were told that in reporting they could follow the definition of payrolls used for calculating the Federal withholding tax.

**Man-Hours of Production Workers**—This total relates to production-worker man-hours worked or paid for at the plant including actual overtime hours (not straight-time equivalent hours). It excludes hours paid for vacation, holidays, or sick leave when the employee was not at the plant.

**Cost of Materials**—The term "Cost of Materials" refers to charges actually paid or payable for items consumed or put into production during the year, including freight and other direct charges incurred by the establishment in acquiring these materials. It includes the cost of materials or fuel consumed regardless of

whether these items were purchased by the establishment from other companies, transferred to it from other establishments of the same company, or withdrawn from inventory during the year. The establishment was requested to value materials transferred from other parts of the company at its approximate market value, not at cost of production. The important components of this cost item are (a) all raw materials, semifinished goods, parts, components, containers, scrap, and supplies put into production or used as operating supplies and for repair and maintenance during the year; (b) electric energy purchased; (c) fuels consumed for heat, power, or the generation of electricity; (d) work done by others on materials or parts furnished by manufacturing establishments (contract work); and (e) products bought and resold in the same condition.

**Value of Shipments**—The value of shipments is the received or receivable net selling value, f.o.b. plant (exclusive of freight and taxes), of all products shipped, both primary and secondary, as well as all miscellaneous receipts such as receipts for contract work performed for others, installation and repair, sales of scrap, and sale of products bought and resold without further processing. Included are all items made by the establishment or for it under contract from materials owned by it whether sold, transferred to other plants of the same company, or shipped on consignment. The net selling value of products made in one plant on a contract basis from materials owned by another was reported by the plant providing the materials.

In the case of multiunit companies, the manufacturer was requested to report the value of products transferred to other establishments of the same company at full economic value; i.e., to include not only the direct costs of production but also a reasonable proportion of "all other costs" (including company overhead) and profit.

**Duplication in Cost of Materials and Value of Products**—The aggregate cost of materials and value-of-shipments figures for industry groups and for all manufacturing industries may include large amounts of duplication since the products of some industries are used as materials by others. With some important exceptions, such as motor vehicles and parts, this duplication is not significant within individual industries but arises from the addition of the totals of related industries in successive stages of the production of a finished manufactured product. Examples are the addition of flour mills to bakeries in the food group and the addition of pulp mills to paper mills in the paper and allied products group of industries. Esti-



mates of this duplication indicate that the value of manufactured products exclusive of such duplication—the value of finished manufactures—approximates two-thirds of the total value of products.

Prior to 1962, the Bureau of the Census did not publish figures for cost of materials or value of shipments if they contained significant duplication. Effective with the 1962 annual survey these figures were shown at all industry levels for the United States to meet the requests for their use in studies in which the presence of an indeterminate amount of duplication is not a limiting factor. However, they are appropriately footnoted. Effective with the 1964 annual survey, these industry group totals are also shown at the State, standard metropolitan statistical area, and large-county level.

Even where there is no significant amount of duplication, value-of-shipments figures are deficient as measures of the relative economic importance of individual manufacturing industries or geographic areas because of the wide variation in ratio of materials, labor, and other processing costs to value of shipments among industries.

**Value Added by Manufacture**—This measure of manufacturing activity is derived by subtracting the cost of materials, supplies, containers, fuel, purchased electricity, and cost of resales contract work from the value of shipments for products manufactured plus resales and receipts for services rendered. The result of this calculation is adjusted by the net change in finished goods and work-in-process inventories between the beginning and end of the year. (In the few industries that report value of production rather than value of shipments, only changes in work-in-process inventories are used to adjust value added. In the shipbuilding and repairing industry, no inventory adjustment is made.)

“Value added” avoids the duplication in the value of shipments figure which results from the use of products of some establishments as materials by others. Value added is considered to be the best value measure available for comparing the relative economic importance of manufacturing among industries and geographic areas.

**Expenditures for Plant and Equipment**—Manufacturing establishments in operation and establishments under construction but not yet in operation, were asked to report their expenditures for (a) permanent additions and major alterations to the manufacturing establishment, and (b) new machinery and equipment used for replacement purposes and additions to plant capacity if they are of the type for which depreciation accounts are ordinarily maintained.

These totals exclude expenditures for new facilities and equipment leased from nonmanufacturing concerns; new facilities owned by the Federal Government but operated under contract by private companies; and plant and equipment furnished to the manufacturer by communities and nonprofit organizations. Expenditures for used plant and equipment (although reported in the census), expenditures for land, and cost of maintenance and repairs charged as current operating expense are also omitted from the figures for new capital expenditures.

**Central Administrative Offices and Auxiliary Units**—In the 1972 census as in previous years, respondents were asked to file separate reports for central administrative offices or auxiliary units which were (1) at different locations from the establishments served or, (2) at the same location as one of these establishments but were not operated as an integral part thereof and served two or more establishments. The functions of employees in central administrative offices include general company policy determination, planning and management (that is, company purchasing, accounting, general engineering, direction of company personnel matters, and legal and patent matters). Auxiliaries are storage facilities, garages, repair shops, purchasing offices, sales promotion offices, and research laboratories serving the plants or central management of the company.

**Standard Metropolitan Statistical Areas**—Standard metropolitan statistical areas (SMSA) are integrated economic and social units with a large volume of daily travel and communication between the central city and outlying parts of the area.<sup>1</sup> Each area (except in New England) consists of one whole county or more. An area may contain not only highly industrialized counties but also adjoining counties which, though primarily residential in character, contribute significantly to the industrial counties' labor force and are socially and economically integrated with the central city. These areas are defined by the Federal Committee on Standard Metropolitan Statistical Areas of the Office of Management and Budget for general-purpose use throughout the Federal Government in presenting economic and social data. In the New England States, similar intergration criteria are applied in defining

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<sup>1</sup> Each standard metropolitan statistical area must include either (1) a city with 50,000 or more inhabitants, or (2) a city having a population of at least 25,000 which (a) with the addition of the population of contiguous places has a population density of at least 1,000 persons per square mile; (b) constitutes, for general economic and social purposes, a single community with a combined population of at least 50,000; and (c) includes a total population of at least 75,000 in the county or counties in which the city and contiguous places are located.

SMSA's on a city and town basis because towns rather than counties are regarded as the significant unit in this region of the country.

The requirement that each SMSA consist of county units (except in New England) sometimes results in the inclusion in an area of considerable amount of territory which would not ordinarily be considered "metropolitan," much less "industrial." It is recognized that metropolitan areas could be more accurately defined in terms of smaller area segments such as minor civil

divisions, but the usefulness of areas so defined would be limited by the fact that many types of economic and social data are available only on a county basis.

Each SMSA is designated by the name of the principal city of the area. In addition to the name of the principal city, the area title may include one or two additional city names.

The data for SMSA's which changed definition since the 1967 census have not been retabulated on the new basis for years prior to 1972.



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PRELIMINARY REPORT

# 1972 CENSUS OF MANUFACTURES

## AREA SERIES

C72(P)-S28

U. S. DEPARTMENT OF COMMERCE • Social and Economic Statistics Administration • BUREAU OF THE CENSUS

Issued March 1974

## Nebraska

Value added by manufacturing in 1972 in the State of Nebraska amounted to \$1,738 million, a 9-percent increase from 1971 and a 51-percent increase from 1967.

This report presents preliminary results from the 1972 Census of Manufactures for the State, its Standard Metropolitan Statistical Areas, and its counties.

Data are provided for industry groups within the State. Historical data, back to 1958, are included for the State as a whole,

and 1967 figures on employment and value added are provided for the smaller areas.

The figures in this report have been subjected to only preliminary review and must be regarded as approximations of the final census figures. No adjustments have been made in the value figures for changes in price level.

For an explanation of the terms used in the tables, see the appendix at the end of this report.

TABLE 1. General Statistics for the State: 1972 and Earlier Years

(See appendix, Explanation of Terms)

Year	Establishments		All employees <sup>1</sup>		Production workers			Value added by manufacture	Cost of materials <sup>2</sup>	Value of shipments <sup>2</sup>	Capital expenditures, new
	Total	With 20 employees or more	Number	Payroll	Number	Man-hours	Wages				
	(number)	(number)	(1,000)	(million dollars)	(1,000)	(millions)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(million dollars)
NEBRASKA											
1972 Census .....	1,703	588	84.8	703.3	63.0	127.5	469.1	1,737.9	4,240.6	5,923.2	104.6
1971 ASM .....	(NA)	(NA)	80.2	618.0	58.7	119.2	411.2	1,594.1	3,234.6	4,826.6	86.5
1970 ASM .....	(NA)	(NA)	81.3	581.2	60.0	119.8	385.8	1,497.0	2,946.7	4,419.4	83.0
1969 ASM .....	(NA)	(NA)	84.0	576.2	64.3	129.4	398.1	1,415.6	3,047.3	4,440.5	94.8
1968 ASM .....	(NA)	(NA)	79.6	513.4	59.9	119.4	348.0	1,252.6	2,642.8	3,856.7	68.2
1967 Census .....	1,672	525	77.0	475.9	58.4	119.2	325.0	1,150.0	2,402.7	3,531.7	71.4
1966 ASM .....	(NA)	(NA)	71.4	419.4	53.1	110.5	283.6	992.9	2,170.4	3,131.4	75.5
1965 ASM .....	(NA)	(NA)	65.9	376.4	47.9	100.5	248.5	870.3	1,874.5	2,742.6	57.3
1964 ASM .....	(NA)	(NA)	65.4	365.3	47.1	98.1	243.5	870.5	1,747.6	2,607.9	50.2
1963 Census .....	1,611	474	64.9	348.0	47.0	96.7	228.5	746.6	(NA)	(NA)	46.1
1962 ASM .....	(NA)	(NA)	63.2	331.5	45.5	91.9	218.2	694.2	(NA)	(NA)	43.6
1961 ASM .....	(NA)	(NA)	62.1	319.5	44.8	92.2	211.0	650.6	(NA)	(NA)	40.6
1960 ASM .....	(NA)	(NA)	61.2	306.4	44.5	91.3	201.8	618.2	(NA)	(NA)	33.8
1959 ASM .....	(NA)	(NA)	60.6	289.2	44.2	90.0	190.2	569.9	(NA)	(NA)	35.5
1958 Census .....	1,553	412	58.6	265.2	42.9	87.8	174.2	536.3	(NA)	(NA)	49.9

Note: "ASM" data are based on a representative sample of manufacturing establishments canvassed in the Annual Survey of Manufactures. These estimates may differ from the results of a complete canvass of all manufacturing establishments. The standard errors associated with these estimates are published in the annual survey of manufactures volumes for this period. For comparative purposes, the 1972 ASM estimate for the State of Nebraska was 86 thousand employees, and \$1,828 million in value added with corresponding standard error of estimate of 4 and 2.

(NA) Not available.

<sup>1</sup>Includes employment and payroll at central administrative offices and auxiliary units. (For a definition of these units, see appendix.)

<sup>2</sup>The total cost of materials and value of shipments may include extensive duplication arising from shipments between establishments in the same industry classification. (For a more complete explanation, see appendix.)

TABLE 2. General Statistics for the State, Standard Metropolitan Statistical Areas, and Counties: 1972 and 1967

(See appendix, Explanation of Terms)

State, standard metropolitan statistical areas, and counties <sup>1</sup>	1972										1967		
	Establishments		All employees <sup>2</sup>		Production workers			Value added by manu- facture	Cost of materials <sup>3</sup>	Value of shipments <sup>3</sup>	Capital expendi- tures, new	All employees	Value added by manu- facture
	Total	With 20 employees or more	Number	Payroll	Number	Man-hours	Wages						
	(number)	(number)	(1,000)	(million dollars)	(1,000)	(million)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(1,000)	(million dollars)
NEBRASKA, TOTAL. . . . .	1 703	588	84.8	703.3	63.0	127.5	469.1	1 737.9	4 240.6	5 923.2	104.6	77.0	1 150.0 <sup>4</sup>
STANDARD METROPOLITAN STATISTICAL AREAS <sup>4</sup>													
LINCOLN. . . . .	178	77	11.5	95.4	8.2	16.4	59.8	240.7	356.6	586.9	11.8	9.5	120.2
OMAHA. . . . .	607	249	38.6	344.8	28.4	55.9	227.5	852.8	1 959.0	2 779.6	41.9	36.6	603.9
PORTION IN IOWA. . . . .	73	26	3.7	26.9	3.1	6.2	19.8	79.0	224.7	301.1	4.4	2.0	23.1
PORTION IN NEBRASKA. . . . .	534	223	34.9	317.9	25.3	49.7	207.7	773.8	1 734.3	2 478.5	37.5	34.6	580.7
SIOUX CITY. . . . .	154	63	10.6	87.9	7.7	15.9	57.4	196.8	1 065.8	1 261.5	11.0	9.2	117.2
COUNTIES													
ADAMS. . . . .	60	20	2.0	15.7	1.4	2.8	9.0	34.4	41.1	74.9	2.1	1.8	28.2
BUFFALO. . . . .	45	15	1.8	12.8	1.4	3.1	8.9	33.8	30.0	64.3	1.9	1.4	17.2
CASS. . . . .	13	2	.4	3.6	.3	.6	3.2	13.0	7.8	21.2	(D)	(D)	(D)
DAWSON. . . . .	51	20	2.0	13.8	1.6	3.6	10.9	46.1	88.6	135.0	1.7	1.5	35.7
DODGE. . . . .	58	27	2.9	25.9	2.3	4.3	18.9	53.6	184.0	239.4	2.5	2.7	42.8
DOUGLAS. . . . .	517	219	34.2	313.1	24.9	48.8	204.6	762.1	1 715.9	2 448.1	36.7	34.0	565.5
GAGE. . . . .	18	12	1.3	10.0	.9	2.0	6.2	31.4	31.2	61.2	.8	1.3	26.8
HALL. . . . .	60	23	4.1	34.9	3.2	6.7	25.1	68.0	176.3	242.3	4.5	6.0	52.6
KEITH. . . . .	15	3	.7	4.9	.4	1.1	2.6	10.1	2.2	12.0	(D)	(D)	(D)
LANCASTER. . . . .	178	77	11.5	95.4	8.2	16.4	59.8	240.7	356.6	586.9	11.8	9.5	120.2
LINCOLN. . . . .	23	7	.6	3.4	.3	.6	2.2	7.4	14.6	22.1	.3	.4	4.7
MADISON. . . . .	36	19	1.8	12.1	1.3	2.6	7.4	35.1	86.5	120.9	3.4	1.4	19.1
NEMAHA. . . . .	8	4	.4	2.4	.3	.7	1.9	4.2	4.9	9.2	.3	.2	3.3
OTOE. . . . .	14	7	.9	6.0	.7	1.5	4.8	22.3	19.5	40.6	1.7	1.1	15.9
PLATTE. . . . .	47	16	4.0	28.8	2.9	5.9	17.1	64.8	50.5	114.8	2.3	3.3	40.1
RED WILLOW. . . . .	15	9	.6	3.9	.5	1.0	2.9	10.5	21.6	31.4	1.0	.2	7.3
RICHARDSON. . . . .	12	4	.4	3.2	.2	.5	1.3	5.3	11.6	16.8	.2	.6	4.4
SALINE. . . . .	20	5	1.0	8.5	.9	2.0	6.7	31.7	60.4	91.6	2.6	1.0	21.4
SARPY. . . . .	17	4	.7	4.8	.4	.9	3.1	11.7	18.4	30.4	.8	.6	15.3
SAUNDERS. . . . .	19	5	.3	2.3	.2	.5	1.6	5.8	26.2	32.0	.5	.2	2.5
SCOTTS BLUFF. . . . .	55	18	2.4	20.1	1.9	3.8	14.9	53.4	116.9	162.3	3.2	1.7	23.0
THURSTON. . . . .	10	4	.3	1.8	.2	.4	1.0	3.2	3.8	6.8	.2	(D)	(D)
WASHINGTON. . . . .	17	3	.7	4.1	.6	1.2	3.1	8.0	9.6	17.6	.1	.6	6.4
YORK. . . . .	16	7	.5	4.8	.4	.8	3.3	11.9	40.8	52.4	.2	.5	7.8

(D) Withheld to avoid disclosing figures for individual companies.

<sup>1</sup>Some counties were withheld from publication in order to (a) avoid disclosing figures for individual companies or (b) permit further checking of the figures for smaller counties. Additional detail will appear in the final report for this State.<sup>2</sup>Includes employment and payroll at central administrative offices and auxiliary units. (For a definition of these units, see appendix.)<sup>3</sup>The total cost of materials and value of shipments may include extensive duplication arising from shipments between establishments in the same industry classification. (For a more complete explanation, see appendix.)<sup>4</sup>The standard metropolitan statistical areas in this State are defined as follows:

LINCOLN SMSA: Coextensive with Lancaster County, NE.

OMAHA, NE-IA, SMSA: Consists of Douglas and Sarpy Counties, NE, and Pottawattamie County, IA.

SIOUX CITY, IA-NE, SMSA: Consists of Woodbury County, IA, and Dakota County, NE.



TABLE 3. General Statistics for the State, by Industry Groups and Industries: 1972 and 1967

(See appendix, Explanation of Terms)

Code	Industry	1972											1967	
		Establishments		All employees		Production workers			Value added by manufacture	Cost of materials <sup>1</sup>	Value of shipments <sup>1</sup>	Capital expenditures, new	All employees	Value added by manufacture
		Total	With 20 employees or more	Number	Payroll	Number	Man-hours	Wages						
		(number)	(number)	(1,000)	(million dollars)	(1,000)	(million)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(1,000)	(million dollars)
	ALL INDUSTRIES, TOTAL <sup>2</sup> . . . . .	1 703	588	84.8	703.3	63.0	127.5	469.1	1 737.9	4 240.6	5 923.2	104.6	77.0	1 150.0
20	FOOD AND KINDRED PRODUCTS . . . . .	420	187	25.4	214.1	19.1	40.2	152.6	584.6	3 234.1	3 780.2	27.4	26.0	428.7
201	MEAT PRODUCTS . . . . .	102	60	12.5	113.4	10.5	21.7	91.6	264.0	2 511.2	2 736.4	11.0	13.1	186.2
2011	MEATPACKING PLANTS . . . . .	77	42	9.3	92.2	7.7	16.3	75.0	218.4	2 384.0	2 570.9	6.4	10.1	160.1
2013	SAUSAGES AND OTHER PREPARED MEATS . . . . .	13	10	1.3	11.6	1.0	2.0	8.5	30.1	78.1	102.3	3.7	.6	6.7
202	DAIRY PRODUCTS . . . . .	52	27	2.1	16.3	1.0	2.0	7.0	30.1	123.7	153.7	2.4	2.5	31.1
204	GRAIN MILL PRODUCTS . . . . .	154	43	4.0	34.8	2.9	6.8	24.1	149.3	277.4	426.7	7.6	3.7	100.3
2041	FLOUR AND OTHER GRAIN MILL PRODUCTS . . . . .	9	6	.5	4.9	.4	1.0	4.2	22.7	75.6	99.2	2.4	CC	(D)
205	BAKERY PRODUCTS . . . . .	21	14	1.5	12.5	.8	1.7	6.3	24.9	20.6	45.4	1.3	1.4	17.2
207	FATS AND OILS . . . . .	20	7	.5	4.3	.4	.8	3.0	10.0	120.2	129.6	.8	(NA)	(NA)
208	BEVERAGES . . . . .	30	16	.9	8.2	.5	1.0	3.6	22.7	30.8	53.5	.8	1.2	20.3
209	MISC. FOODS AND KINDRED PRODUCTS . . . . .	20	7	.9	7.0	.5	1.0	3.1	28.4	49.6	77.8	(D)	(NA)	(NA)
22	TEXTILE MILL PRODUCTS . . . . .	5	4	.3	1.8	.3	.5	1.4	4.0	5.7	9.6	.2	(NA)	(NA)
23	APPAREL, OTHER TEXTILE PRODUCTS . . . . .	42	17	1.6	7.5	1.4	2.6	5.9	18.1	13.1	30.6	.3	1.7	15.6
24	LUMBER AND WOOD PRODUCTS . . . . .	66	22	2.3	16.9	2.0	4.0	12.6	30.3	61.5	91.9	1.3	(NA)	(NA)
243	MILLWORK, PLYWOOD, STRUC. MEMBERS . . . . .	28	7	.5	3.8	.4	.9	2.9	6.8	8.8	15.6	.4	(NA)	(NA)
2434	WOOD KITCHEN CABINETS . . . . .	11	3	.3	2.1	.3	.5	1.8	3.8	4.8	8.6	.3	(NA)	(NA)
245	WOOD BUILDINGS AND MOBILE HOMES . . . . .	12	11	1.3	10.1	1.1	2.3	7.5	19.7	47.2	67.2	.5	(NA)	(NA)
25	FURNITURE AND FIXTURES . . . . .	36	14	1.9	15.9	1.4	2.7	8.7	31.1	27.3	57.3	2.7	1.5	19.5
251	HOUSEHOLD FURNITURE . . . . .	19	10	.8	6.1	.7	1.3	4.2	10.5	10.2	20.5	(D)	(NA)	(NA)
2512	UPHOLSTERED HOUSEHOLD FURNITURE . . . . .	3	5	.4	3.6	.4	.7	2.6	5.9	4.6	10.4	.2	(NA)	(NA)
2541	WOOD PARTITIONS AND FIXTURES . . . . .	9	1	.3	2.4	.2	.5	1.6	4.4	3.3	7.6	.2	BB	(D)
26	PAPER AND ALLIED PRODUCTS . . . . .	18	13	1.3	11.0	1.0	2.1	7.5	24.4	33.1	57.6	1.0	EE	(D)
264	MISC. CONVERTED PAPER PRODUCTS . . . . .	7	5	.6	4.6	.5	.9	3.4	12.4	15.0	27.7	.7	BB	(D)
265	PAPERBOARD CONTAINERS AND BOXES . . . . .	11	8	.7	6.3	.5	1.1	4.1	12.0	18.0	29.9	.3	CC	(D)
27	PRINTING AND PUBLISHING . . . . .	351	61	6.1	48.2	3.9	7.3	28.0	91.2	48.1	140.2	5.6	5.4	59.6
2711	NEWSPAPERS . . . . .	160	25	3.0	21.5	1.6	3.0	11.1	47.0	14.4	61.5	3.3	2.6	30.1
275	COMMERCIAL PRINTING . . . . .	134	25	2.2	18.3	1.7	3.1	12.7	31.1	24.8	56.3	1.7	(NA)	(NA)
2751	COMMERCIAL PRINTING, LETTERPRESS . . . . .	77	7	.7	5.2	.5	.9	3.7	9.6	6.3	16.0	.4	(NA)	(NA)
28	CHEMICALS AND ALLIED PRODUCTS . . . . .	46	19	2.5	21.9	1.4	2.8	10.9	96.0	79.9	173.5	6.1	2.3	91.7
283	DRUGS . . . . .	4	7	1.1	10.5	.5	1.0	3.6	45.9	21.2	66.5	3.7	.9	30.3
287	AGRICULTURAL CHEMICALS . . . . .	20	7	.9	7.1	.6	1.2	4.7	33.5	43.7	75.9	1.4	(NA)	(NA)
2873	NITROGENOUS FERTILIZERS . . . . .	3	5	.4	4.4	.3	.6	2.8	18.7	16.2	34.3	.7	(NA)	(NA)
30	RUBBER AND MISC. PLASTICS PROD . . . . .	25	16	3.4	28.1	2.8	5.3	21.1	61.8	34.9	93.7	3.8	(NA)	(NA)
3079	MISCELLANEOUS PLASTICS PRODUCTS . . . . .	20	10	1.0	6.9	.7	1.4	4.2	14.2	11.5	25.1	1.0	(NA)	(NA)
32	STONE, CLAY, AND GLASS PRODUCTS . . . . .	140	37	2.5	20.9	1.8	3.8	14.3	53.8	42.6	96.2	20.8	2.2	32.1
327	CONCRETE, GYPSUM, PLASTER PRODUCTS . . . . .	106	29	1.7	14.1	1.1	2.5	8.6	34.7	33.9	68.2	3.9	1.6	19.8
3273	READY-MIXED CONCRETE . . . . .	66	12	.7	6.3	.4	.9	3.2	15.8	22.5	38.3	2.5	.7	10.4
33	PRIMARY METAL INDUSTRIES . . . . .	20	12	2.6	27.6	2.1	4.3	20.4	90.9	210.2	287.4	4.6	2.6	57.9
34	FABRICATED METAL PRODUCTS . . . . .	108	47	7.3	60.6	5.6	11.5	40.8	114.7	112.3	224.3	4.3	(NA)	(NA)
344	FABRICATED STRUCTURAL METAL PROD . . . . .	52	23	2.7	23.1	1.8	3.6	12.6	51.0	65.3	115.3	2.4	3.0	35.6
3441	FABRICATED STRUCTURAL METAL PRODUCTS . . . . .	9	7	1.1	9.7	.7	1.4	5.0	18.6	24.8	43.3	.5	.7	6.2
3444	SHEET METALWORK . . . . .	11	7	.9	7.2	.6	1.2	3.9	16.7	20.1	36.2	.4	.6	7.5
348	ORDNANCE AND ACCESSORIES, NEC. . . . .	6	4	1.7	13.7	1.5	3.1	11.0	17.9	12.4	29.2	.7	(NA)	(NA)
349	MISC. FABRICATED METAL PRODUCTS . . . . .	21	7	1.3	9.4	1.0	2.0	6.4	21.7	16.1	37.4	.4	(NA)	(NA)
3494	VALVES AND PIPE FITTINGS . . . . .	6	3	.5	4.2	.3	.7	2.3	10.7	7.2	17.7	.2	BB	(D)
35	MACHINERY, EXCEPT ELECTRICAL . . . . .	202	54	8.5	75.8	6.4	13.1	50.3	189.5	149.0	333.9	12.9	5.9	102.1
352	FARM AND GARDEN MACHINERY . . . . .	67	30	4.5	37.0	3.4	7.0	25.1	89.1	92.8	177.2	8.0	(NA)	(NA)
36	ELECTRIC, ELECTRONIC EQUIPMENT . . . . .	42	23	9.6	79.1	7.3	14.1	53.7	172.5	96.2	262.3	8.0	(NA)	(NA)
37	TRANSPORTATION EQUIPMENT . . . . .	34	17	3.5	28.0	2.9	5.9	19.3	71.6	53.1	124.2	2.2	(NA)	(NA)
371	MOTOR VEHICLES AND EQUIPMENT . . . . .	15	7	2.2	16.1	1.8	3.7	11.7	49.5	29.5	79.6	1.1	1.8	31.7
38	INSTRUMENTS AND RELATED PRODUCTS . . . . .	26	7	2.7	17.6	2.4	4.7	14.7	75.7	26.9	101.9	2.4	(NA)	(NA)
39	MISC. MANUFACTURING INDUSTRIES . . . . .	67	12	1.5	8.8	1.1	2.1	5.7	18.8	11.9	31.3	.6	1.7	16.5
399	MISCELLANEOUS MANUFACTURES . . . . .	47	8	.6	3.4	.4	.8	2.2	5.4	4.1	9.5	.3	.6	4.8
--	ADMINISTRATIVE AND AUXILIARY . . . . .	32	16	1.8	19.8	-	-	-	-	-	-	-	1.1	-

Note: The following symbols indicate employment size range for 1967:

AA less than 250 employees      EE 1,000 to 2,499 employees  
BB 250 to 499 employees      FF 2,500 employees and over  
CC 500 to 999 employees

- Represents zero. (NA) Not available. Because of a revision to this industry group in the 1972 edition of the SIC manual, 1967 census data are not available on a comparable basis.  
(D) Withheld to avoid disclosing figures for individual companies.

<sup>1</sup>The total cost of materials and value of shipments for industry groups shown may include extensive duplication arising from shipments between establishments in the same industry classification. (For a more complete explanation, see appendix.)

<sup>2</sup>Includes figures for industry groups which have been withheld from publication in order to (a) avoid disclosing figures for individual companies or (b) permit further checking of figures for smaller industry groups. Additional detail will appear in the final report for this State.

## Appendix A. SCOPE AND COVERAGE

This report is one of a series presenting preliminary information, by State, from the 1972 Census of Manufactures. The data will be superseded in a final report which, in turn, will be included in *Volume III, Area Statistics, 1972 Census of Manufactures*. The final report will include a comprehensive discussion of the concepts and definitions used in the census.

The census of manufactures covers each manufacturing establishment in the United States with one paid employee or more; manufacturing establishments with no employees are excluded. Firms which operated more than one establishment were required to file a separate report for each location. Companies which engaged in distinctly different lines of activity at one location were asked to submit separate reports if the company records permitted such a separation and the activities were of significant size.

This report includes figures for administrative offices, warehouses, garages, or other auxiliary units which service manufacturing establishments.

In the 1972 census, the approximately 120,000 manufacturing establishments with fewer than 10 employees were excused from filing reports. Under special arrangements which safeguarded the confidentiality of both tax and census records, data on payrolls, sales, and industry classification from the administrative records of the Social Security Administration and the Internal Revenue Service were made available to the Census Bureau for use in the 1972 Economic Censuses (retail and wholesale trade, service industries, construction industries, manufactures, and mineral industries). Estimates for data other than payrolls and sales for these small establishments were constructed from industry averages. The effect on industry aggregates is slight in most industries. For manufacturing as a whole, these small establishments account for less than 3 percent of the payrolls and value added.

Establishments are classified by industry in accordance with industry definitions described in the 1972 edition of the Standard Industrial Classification (SIC) Manual. For 1972, the SIC was significantly revised and the comparability with prior year's data for some industries was significantly affected. The comparability at the 2- and 3-digit SIC levels was less affected. The final volumes of the 1972 Census of Manufactures will contain a table relating aggregates based on the 1972 SIC with aggregates derived from classifying establishments according to the 1967 SIC definitions.

As in earlier censuses, a number of small establishments may have been misclassified as to industry. However, such possible misclassifications have significant effect on *none* of the statistics except the number of establishments. As indicated above, report forms were not mailed to very small establishments (fewer than 10 employees). The industry classifications for these establishments were assigned on the basis of brief descriptions of the general activity of the establishment. Where the description is incomplete or there are relatively fine lines of demarcation among industries or between manufacturing and nonmanufacturing activity, the code assigned to an establishment could differ from that which would have been assigned on the basis of more complete product information. Therefore, the total establishment count for individual industries should be viewed as an approximation rather than a precise measurement. The counts for establishments with 20 employees or more are more reliable than the total number of establishments.

More detailed figures for this State will appear in the final census reports. Final reports will also include a comprehensive discussion of such concepts as "industry" and "establishment," as well as the various statistical items such as "employment," "value of shipments," and "value added." Similar preliminary and final reports will be issued for other States during the coming months. A series of preliminary summary reports showing U.S. totals for each manufacturing industry and for each State are being issued. Final industry reports and final area reports will be published during 1974.

Order forms describing the individual reports and listing their prices may be obtained from any U.S. Department of Commerce district office or from the Publications Distribution Section, Social and Economic Statistics Administration, Washington, D.C. 20233.

The 1972 Census of Manufactures is the 29th census of manufacturing establishments in the United States. For 1972, it was conducted jointly with the censuses of mineral industries, construction industries, retail trade, wholesale trade, and selected services under authority of Title 13 of the United States Code. Title 13 specifies that a census of manufactures be conducted every 5 years and, as amended, to cover years ending in "2" and "7". Title 13 also authorizes an annual sample survey of manufacturing establishments in interim years.



## Appendix B. EXPLANATION OF TERMS

*(For a more complete discussion of these terms and the method of compiling the Census of Manufactures, see the "Introduction" to the 1967 Census of Manufactures, Volume III).*

**All Employees**—All full-time and part-time employees on the payrolls of operating manufacturing establishments for any part of the pay period ending nearest the 12th of the months specified on the report form. Included are all persons on paid sick leave, paid holidays, and paid vacations during these pay periods. Officers of corporations are included as employees; proprietors and partners of unincorporated firms are excluded. The "all employee" number is the average number of production workers for the midmonth payroll period of March, May, August, and November plus the number of nonproduction employees in mid-March.

**Number of Production Workers**—Workers (up through the working foreman level) engaged in fabricating, processing, assembling, inspecting, receiving, packing, warehousing, shipping (but not delivering), and maintenance, repair, janitorial, and watchman services, product development, auxiliary production for plant's own use (e.g., powerplant), recordkeeping, and other closely associated services. Proprietors and partners are excluded.

**Payroll**—This item includes all forms of compensation such as salaries, wages, commissions, dismissal pay, bonuses, vacation and sick leave pay, and compensation in kind, prior to such deductions as employees' Social Security contributions, withholding taxes, group insurance, union dues, and savings bonds. The total includes salaries of officers of these establishments, if a corporation; it excludes payments to the proprietor or partners, if an unincorporated concern. Respondents were told that in reporting they could follow the definition of payrolls used for calculating the Federal withholding tax.

**Man-Hours of Production Workers**—This total relates to production-worker man-hours worked or paid for at the plant including actual overtime hours (not straight-time equivalent hours). It excludes hours paid for vacation, holidays, or sick leave when the employee was not at the plant.

**Cost of Materials**—The term "Cost of Materials" refers to charges actually paid or payable for items consumed or put into production during the year, including freight and other direct charges incurred by the establishment in acquiring these materials. It includes the cost of materials or fuel consumed regardless of

whether these items were purchased by the establishment from other companies, transferred to it from other establishments of the same company, or withdrawn from inventory during the year. The establishment was requested to value materials transferred from other parts of the company at its approximate market value, not at cost of production. The important components of this cost item are (a) all raw materials, semifinished goods, parts, components, containers, scrap, and supplies put into production or used as operating supplies and for repair and maintenance during the year; (b) electric energy purchased; (c) fuels consumed for heat, power, or the generation of electricity; (d) work done by others on materials or parts furnished by manufacturing establishments (contract work); and (e) products bought and resold in the same condition.

**Value of Shipments**—The value of shipments is the received or receivable net selling value, f.o.b. plant (exclusive of freight and taxes), of all products shipped, both primary and secondary, as well as all miscellaneous receipts such as receipts for contract work performed for others, installation and repair, sales of scrap, and sale of products bought and resold without further processing. Included are all items made by the establishment or for it under contract from materials owned by it whether sold, transferred to other plants of the same company, or shipped on consignment. The net selling value of products made in one plant on a contract basis from materials owned by another was reported by the plant providing the materials.

In the case of multiunit companies, the manufacturer was requested to report the value of products transferred to other establishments of the same company at full economic value; i.e., to include not only the direct costs of production but also a reasonable proportion of "all other costs" (including company overhead) and profit.

**Duplication in Cost of Materials and Value of Products**—The aggregate cost of materials and value-of-shipments figures for industry groups and for all manufacturing industries may include large amounts of duplication since the products of some industries are used as materials by others. With some important exceptions, such as motor vehicles and parts, this duplication is not significant within individual industries but arises from the addition of the totals of related industries in successive stages of the production of a finished manufactured product. Examples are the addition of flour mills to bakeries in the food group and the addition of pulp mills to paper mills in the paper and allied products group of industries. Esti-



mates of this duplication indicate that the value of manufactured products exclusive of such duplication—the value of finished manufactures—approximates two-thirds of the total value of products.

Prior to 1962, the Bureau of the Census did not publish figures for cost of materials or value of shipments if they contained significant duplication. Effective with the 1962 annual survey these figures were shown at all industry levels for the United States to meet the requests for their use in studies in which the presence of an indeterminate amount of duplication is not a limiting factor. However, they are appropriately footnoted. Effective with the 1964 annual survey, these industry group totals are also shown at the State, standard metropolitan statistical area, and large-county level.

Even where there is no significant amount of duplication, value-of-shipments figures are deficient as measures of the relative economic importance of individual manufacturing industries or geographic areas because of the wide variation in ratio of materials, labor, and other processing costs to value of shipments among industries.

**Value Added by Manufacture**—This measure of manufacturing activity is derived by subtracting the cost of materials, supplies, containers, fuel, purchased electricity, and cost of resales contract work from the value of shipments for products manufactured plus resales and receipts for services rendered. The result of this calculation is adjusted by the net change in finished goods and work-in-process inventories between the beginning and end of the year. (In the few industries that report value of production rather than value of shipments, only changes in work-in-process inventories are used to adjust value added. In the shipbuilding and repairing industry, no inventory adjustment is made.)

“Value added” avoids the duplication in the value of shipments figure which results from the use of products of some establishments as materials by others. Value added is considered to be the best value measure available for comparing the relative economic importance of manufacturing among industries and geographic areas.

**Expenditures for Plant and Equipment**—Manufacturing establishments in operation and establishments under construction but not yet in operation, were asked to report their expenditures for (a) permanent additions and major alterations to the manufacturing establishment, and (b) new machinery and equipment used for replacement purposes and additions to plant capacity if they are of the type for which depreciation accounts are ordinarily maintained.

These totals exclude expenditures for new facilities and equipment leased from nonmanufacturing concerns; new facilities owned by the Federal Government but operated under contract by private companies; and plant and equipment furnished to the manufacturer by communities and nonprofit organizations. Expenditures for used plant and equipment (although reported in the census), expenditures for land, and cost of maintenance and repairs charged as current operating expense are also omitted from the figures for new capital expenditures.

**Central Administrative Offices and Auxiliary Units**—In the 1972 census as in previous years, respondents were asked to file separate reports for central administrative offices or auxiliary units which were (1) at different locations from the establishments served or, (2) at the same location as one of these establishments but were not operated as an integral part thereof and served two or more establishments. The functions of employees in central administrative offices include general company policy determination, planning and management (that is, company purchasing, accounting, general engineering, direction of company personnel matters, and legal and patent matters). Auxiliaries are storage facilities, garages, repair shops, purchasing offices, sales promotion offices, and research laboratories serving the plants or central management of the company.

**Standard Metropolitan Statistical Areas**—Standard metropolitan statistical areas (SMSA) are integrated economic and social units with a large volume of daily travel and communication between the central city and outlying parts of the area.<sup>1</sup> Each area (except in New England) consists of one whole county or more. An area may contain not only highly industrialized counties but also adjoining counties which, though primarily residential in character, contribute significantly to the industrial counties' labor force and are socially and economically integrated with the central city. These areas are defined by the Federal Committee on Standard Metropolitan Statistical Areas of the Office of Management and Budget for general-purpose use throughout the Federal Government in presenting economic and social data. In the New England States, similar integration criteria are applied in defining

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<sup>1</sup> Each standard metropolitan statistical area must include either (1) a city with 50,000 or more inhabitants, or (2) a city having a population of at least 25,000 which (a) with the addition of the population of contiguous places has a population density of at least 1,000 persons per square mile; (b) constitutes, for general economic and social purposes, a single community with a combined population of at least 50,000; and (c) includes a total population of at least 75,000 in the county or counties in which the city and contiguous places are located.



SMSA's on a city and town basis because towns rather than counties are regarded as the significant unit in this region of the country.

The requirement that each SMSA consist of county units (except in New England) sometimes results in the inclusion in an area of considerable amount of territory which would not ordinarily be considered "metropolitan," much less "industrial." It is recognized that metropolitan areas could be more accurately defined in terms of smaller area segments such as minor civil

divisions, but the usefulness of areas so defined would be limited by the fact that many types of economic and social data are available only on a county basis.

Each SMSA is designated by the name of the principal city of the area. In addition to the name of the principal city, the area title may include one or two additional city names.

The data for SMSA's which changed definition since the 1967 census have not been retabulated on the new basis for years prior to 1972.

**U.S. DEPARTMENT OF COMMERCE**  
**Social and Economic Statistics Administration**  
BUREAU OF THE CENSUS  
Washington, D.C. 20233

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U. S. DEPARTMENT OF COMMERCE • Social and Economic Statistics Administration • BUREAU OF THE CENSUS

# PRELIMINARY REPORT

# 1972 CENSUS OF MANUFACTURES

## AREA SERIES

## Nevada

Value added by manufacturing in 1972 in the State of Nevada amounted to \$216 million, a 48-percent increase from 1971 and a 61-percent increase from 1967.

This report presents preliminary results from the 1972 Census of Manufactures for the State, its Standard Metropolitan Statistical Areas, and its counties.

Data are provided for industry groups within the State. Historical data, back to 1958, are included for the State as a whole,

and 1967 figures on employment and value added are provided for the smaller areas.

The figures in this report have been subjected to only preliminary review and must be regarded as approximations of the final census figures. No adjustments have been made in the value figures for changes in price level.

For an explanation of the terms used in the tables, see the appendix at the end of this report.

TABLE 1. General Statistics for the State: 1972 and Earlier Years

(See appendix, Explanation of Terms)

Year	Establishments		All employees <sup>1</sup>		Production workers			Value added by manufacture	Cost of materials <sup>2</sup>	Value of shipments <sup>2</sup>	Capital expenditures, new
	Total	With 20 employees or more	Number	Payroll	Number	Man-hours	Wages				
	(number)	(number)	(1,000)	(million dollars)	(1,000)	(millions)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(million dollars)
NEVADA											
1972 Census .....	438	108	10.2	94.3	7.0	14.0	59.1	215.6	224.8	433.4	24.3
1971 ASM .....	(NA)	(NA)	7.5	64.6	5.3	10.5	40.3	145.9	163.3	307.4	21.7
1970 ASM .....	(NA)	(NA)	8.3	68.2	6.0	11.7	43.1	158.8	168.6	323.5	13.0
1969 ASM .....	(NA)	(NA)	7.9	62.2	5.8	11.1	39.6	161.8	159.6	322.5	16.5
1968 ASM .....	(NA)	(NA)	6.9	51.2	4.9	9.3	32.0	143.7	134.5	276.0	14.2
1967 Census .....	330	74	7.0	49.6	4.8	9.3	31.2	133.8	117.2	250.0	15.4
1966 ASM .....	(NA)	(NA)	6.4	44.8	4.4	8.8	28.1	114.2	131.1	245.6	6.3
1965 ASM .....	(NA)	(NA)	6.9	44.2	4.9	9.8	28.8	108.1	125.0	230.7	17.2
1964 ASM .....	(NA)	(NA)	6.5	42.4	4.6	9.5	27.9	113.8	120.2	234.5	8.2
1963 Census .....	283	73	6.8	42.2	4.8	9.5	28.4	106.3	(NA)	(NA)	8.7
1962 ASM .....	(NA)	(NA)	5.8	35.7	4.5	9.0	25.4	100.9	(NA)	(NA)	6.0
1961 ASM .....	(NA)	(NA)	5.6	33.2	4.2	8.5	23.8	92.6	(NA)	(NA)	3.6
1960 ASM .....	(NA)	(NA)	5.3	31.0	3.9	7.7	21.0	72.4	(NA)	(NA)	5.4
1959 ASM .....	(NA)	(NA)	5.2	29.5	3.7	7.5	20.4	66.6	(NA)	(NA)	5.5
1958 Census .....	207	45	5.0	27.1	3.7	7.4	18.9	67.6	(NA)	(NA)	5.2

Note: "ASM" data are based on a representative sample of manufacturing establishments canvassed in the Annual Survey of Manufactures. These estimates may differ from the results of a complete canvass of all manufacturing establishments. The standard errors associated with these estimates are published in the annual survey of manufactures volumes for this period. For comparative purposes, the 1972 ASM estimate for the State of Utah was 9 thousand employees, and \$188 million in value added with corresponding standard error of estimate of 6 and 5.

(NA) Not available.

<sup>1</sup>Includes employment and payroll at central administrative offices and auxiliary units. (For a definition of these units, see appendix.)

<sup>2</sup>The total cost of materials and value of shipments may include extensive duplication arising from shipments between establishments in the same industry classification. (For a more complete explanation, see appendix.)

TABLE 2. General Statistics for the State, Standard Metropolitan Statistical Areas, and Counties: 1972 and 1967

(See appendix, Explanation of Terms)

State, standard metropolitan statistical areas, and counties <sup>1</sup>	1972											1967	
	Establishments		All employees <sup>2</sup>		Production workers			Value added by manufacture	Cost of materials <sup>3</sup>	Value of shipments <sup>3</sup>	Capital expenditures, new	All employees	Value added by manufacture
	Total	With 20 employees or more	Number	Payroll	Number	Man-hours	Wages						
	(number)	(number)	(1,000)	(million dollars)	(1,000)	(million)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(1,000)	(million dollars)
NEVADA, TOTAL . . . . .	438	108	10.2	94.3	7.0	14.0	59.1	215.6	224.8	433.4	24.3	7.0	133.8
STANDARD METROPOLITAN STATISTICAL AREAS <sup>4</sup>													
LAS VEGAS . . . . .	163	44	4.2	40.1	2.9	5.8	25.3	94.6	87.9	181.6	10.2	3.9	79.1
RENO . . . . .	169	41	3.3	29.7	2.1	4.3	17.2	66.4	51.2	113.3	7.7	2.1	31.0
COUNTIES													
CLARK . . . . .	163	44	4.2	40.1	2.9	5.8	25.3	94.6	87.9	181.6	10.2	3.9	79.1
DOUGLAS . . . . .	12	3	.4	3.4	.2	.4	2.4	5.6	6.6	12.1	.5	(D)	(D)
LYON . . . . .	11	3	.3	2.5	.2	.4	1.7	6.8	11.3	17.9	.5	.2	3.0
WASHOE . . . . .	169	41	3.3	29.7	2.1	4.3	17.2	66.4	51.2	113.3	7.7	2.1	31.0
CARSON CITY . . . . .	27	7	.4	3.4	.3	.7	2.4	8.0	5.6	13.6	.9	(NA)	(NA)

(NA) Not available. (D) Withheld to avoid disclosing figures for individual companies.

<sup>1</sup>Some counties were withheld from publication in order to (a) avoid disclosing figures for individual companies or (b) permit further checking of the figures for smaller counties. Additional detail will appear in the final report for this State.<sup>2</sup>Includes employment and payroll at central administrative offices and auxiliary units. (For a definition of these units, see appendix.)<sup>3</sup>The total cost of materials and value of shipments may include extensive duplication arising from shipments between establishments in the same industry classification. (For a more complete explanation, see appendix.)<sup>4</sup>The standard metropolitan statistical areas in this State are defined as follows:

LAS VEGAS SMSA: Coextensive with Clark County, NV.

RENO SMSA: Coextensive with Washoe County, NV.

<sup>5</sup>Carson City and Ormsby County were consolidated into a single municipal government on July 1, 1969.

TABLE 3. General Statistics for the State, by Industry Groups and Industries: 1972 and 1967

(See appendix, Explanation of Terms)

Code	Industry	1972											1967	
		Establishments		All employees		Production workers			Value added by manufacture	Cost of materials <sup>1</sup>	Value of shipments <sup>1</sup>	Capital expenditures, new	All employees	Value added by manufacture
		Total	With 20 employees or more	Number	Payroll	Number	Man-hours	Wages						
		(number)	(number)	(1,000)	(million dollars)	(1,000)	(million)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(1,000)	(million dollars)
	ALL INDUSTRIES, TOTAL <sup>2</sup> . . . .	438	108	10.2	94.3	7.0	14.0	59.1	215.6	224.8	433.4	24.3	7.0	133.8
20	FOOD AND KINDRED PRODUCTS . . .	46	17	1.4	12.3	.8	1.5	5.4	28.3	48.3	76.0	3.8	1.0	14.8
202	DAIRY PRODUCTS . . . . .	8	5	.4	4.4	.1	.3	1.1	8.1	17.7	25.8	.3	.4	6.4
2026	FLUID MILK . . . . .	8	5	.4	4.4	.1	.3	1.1	8.1	17.7	25.8	(D)	88	(D)
208	BEVERAGES . . . . .	7	6	.3	2.7	.1	.2	.7	6.3	7.6	13.7	(D)	.2	4.1
2086	BOTTLED AND CANNED SOFT DRINKS . .	7	6	.3	2.7	.1	.2	.7	6.3	7.6	13.7	(D)	.2	4.1
25	FURNITURE AND FIXTURES . . . . .	18	3	.3	1.7	.2	.5	1.3	3.0	2.8	5.7	.2	.2	1.3
251	HOUSEHOLD FURNITURE . . . . .	13	3	.3	1.4	.2	.4	1.1	2.4	2.3	4.7	.2	(NA)	(NA)
27	PRINTING AND PUBLISHING . . . . .	87	13	1.5	11.9	1.1	2.0	7.7	27.8	9.6	36.8	1.5	1.3	16.3
2711	NEWSPAPERS . . . . .	29	7	1.0	7.6	.7	1.2	4.7	18.3	5.2	23.6	.6	.9	11.9
275	COMMERCIAL PRINTING . . . . .	44	5	.4	3.3	.3	.7	2.6	5.6	2.9	8.5	(D)	(1.4)	(1.4)
28	CHEMICALS AND ALLIED PRODUCTS . .	16	9	.8	8.2	.6	1.4	5.6	37.4	28.3	65.3	1.6	.7	24.3
281	INDUSTRIAL INORGANIC CHEMICALS . .	5	5	.5	5.3	.4	.9	3.6	18.6	14.9	33.9	1.1	(NA)	(1.4)
32	STONE, CLAY, AND GLASS PRODUCTS .	55	25	1.7	19.1	1.3	2.8	13.6	45.6	33.7	78.5	8.3	1.0	14.8
327	CONCRETE, GYPSUM, PLASTER PRODUCTS	39	20	1.1	12.5	.8	1.6	8.4	27.5	24.4	52.0	6.4	.8	12.3
3273	READY-MIXED CONCRETE . . . . .	20	9	.5	5.6	.3	.6	3.5	12.9	9.5	22.3	1.0	.3	4.1
3275	GYPSUM PRODUCTS . . . . .	3	3	.4	4.4	.3	.7	3.1	7.5	10.2	17.8	(D)	.4	3.6
3295	MINERALS, GROUND OR TREATED . . . .	6	3	.4	4.4	.3	.8	3.6	12.1	5.7	17.1	(D)	(NA)	(NA)
34	FABRICATED METAL PRODUCTS . . . .	28	9	.5	5.1	.4	.8	3.8	12.0	9.4	19.7	2.7	(1.4)	(1.4)
35	MACHINERY, EXCEPT ELECTRICAL . .	39	7	.5	4.4	.4	.7	3.0	7.9	9.1	16.2	.8	1.2	1.6
36	ELECTRIC & ELECTRONIC EQUIPMENT .	20	8	.8	6.6	.5	1.0	3.5	12.5	9.9	22.4	.3	(1.4)	(1.4)
39	MISC. MANUFACTURING INDUSTRIES . .	37	5	.3	2.6	.3	.5	1.7	7.1	4.3	11.2	.6	(NA)	(NA)
--	ADMINISTRATIVE AND AUXILIARY . . .	20	11	.4	4.3	-	-	-	-	-	-	-	(NA)	-

Note: The following symbols indicate employment size range for 1967:

AA less than 250 employees

EE 1,000 to 2,499 employees

BB 250 to 499 employees

FF 2,500 employees and over

CC 500 to 999 employees

- Represents zero. (NA) Not available. (D) Withheld to avoid disclosing figures for individual companies.

<sup>1</sup>The total cost of materials and value of shipments for industry groups shown may include extensive duplication arising from shipments between establishments in the same industry classification. (For a more complete explanation, see appendix.)<sup>2</sup>Includes figures for industry groups which have been withheld from publication in order to (a) avoid disclosing figures for individual companies or (b) permit further checking of figures for smaller industry groups. Additional detail will appear in the final report for this State.



## Appendix A. SCOPE AND COVERAGE

This report is one of a series presenting preliminary information, by State, from the 1972 Census of Manufactures. The data will be superseded in a final report which, in turn, will be included in *Volume III, Area Statistics, 1972 Census of Manufactures*. The final report will include a comprehensive discussion of the concepts and definitions used in the census.

The census of manufactures covers each manufacturing establishment in the United States with one paid employee or more; manufacturing establishments with no employees are excluded. Firms which operated more than one establishment were required to file a separate report for each location. Companies which engaged in distinctly different lines of activity at one location were asked to submit separate reports if the company records permitted such a separation and the activities were of significant size.

This report includes figures for administrative offices, warehouses, garages, or other auxiliary units which service manufacturing establishments.

In the 1972 census, the approximately 120,000 manufacturing establishments with fewer than 10 employees were excused from filing reports. Under special arrangements which safeguarded the confidentiality of both tax and census records, data on payrolls, sales, and industry classification from the administrative records of the Social Security Administration and the Internal Revenue Service were made available to the Census Bureau for use in the 1972 Economic Censuses (retail and wholesale trade, service industries, construction industries, manufactures, and mineral industries). Estimates for data other than payrolls and sales for these small establishments were constructed from industry averages. The effect on industry aggregates is slight in most industries. For manufacturing as a whole, these small establishments account for less than 3 percent of the payrolls and value added.

Establishments are classified by industry in accordance with industry definitions described in the 1972 edition of the Standard Industrial Classification (SIC) Manual. For 1972, the SIC was significantly revised and the comparability with prior year's data for some industries was significantly affected. The comparability at the 2- and 3-digit SIC levels was less affected. The final volumes of the 1972 Census of Manufactures will contain a table relating aggregates based on the 1972 SIC with aggregates derived from classifying establishments according to the 1967 SIC definitions.

As in earlier censuses, a number of small establishments may have been misclassified as to industry. However, such possible misclassifications have significant effect on *none* of the statistics except the number of establishments. As indicated above, report forms were not mailed to very small establishments (fewer than 10 employees). The industry classifications for these establishments were assigned on the basis of brief descriptions of the general activity of the establishment. Where the description is incomplete or there are relatively fine lines of demarcation among industries or between manufacturing and nonmanufacturing activity, the code assigned to an establishment could differ from that which would have been assigned on the basis of more complete product information. Therefore, the total establishment count for individual industries should be viewed as an approximation rather than a precise measurement. The counts for establishments with 20 employees or more are more reliable than the total number of establishments.

More detailed figures for this State will appear in the final census reports. Final reports will also include a comprehensive discussion of such concepts as "industry" and "establishment," as well as the various statistical items such as "employment," "value of shipments," and "value added." Similar preliminary and final reports will be issued for other States during the coming months. A series of preliminary summary reports showing U.S. totals for each manufacturing industry and for each State are being issued. Final industry reports and final area reports will be published during 1974.

Order forms describing the individual reports and listing their prices may be obtained from any U.S. Department of Commerce district office or from the Publications Distribution Section, Social and Economic Statistics Administration, Washington, D.C. 20233.

The 1972 Census of Manufactures is the 29th census of manufacturing establishments in the United States. For 1972, it was conducted jointly with the censuses of mineral industries, construction industries, retail trade, wholesale trade, and selected services under authority of Title 13 of the United States Code. Title 13 specifies that a census of manufactures be conducted every 5 years and, as amended, to cover years ending in "2" and "7". Title 13 also authorizes an annual sample survey of manufacturing establishments in interim years.



## Appendix B. EXPLANATION OF TERMS

*(For a more complete discussion of these terms and the method of compiling the Census of Manufactures, see the "Introduction" to the 1967 Census of Manufactures, Volume III).*

**All Employees**—All full-time and part-time employees on the payrolls of operating manufacturing establishments for any part of the pay period ending nearest the 12th of the months specified on the report form. Included are all persons on paid sick leave, paid holidays, and paid vacations during these pay periods. Officers of corporations are included as employees; proprietors and partners of unincorporated firms are excluded. The "all employee" number is the average number of production workers for the midmonth payroll period of March, May, August, and November plus the number of nonproduction employees in mid-March.

**Number of Production Workers**—Workers (up through the working foreman level) engaged in fabricating, processing, assembling, inspecting, receiving, packing, warehousing, shipping (but not delivering), and maintenance, repair, janitorial, and watchman services, product development, auxiliary production for plant's own use (e.g., powerplant), recordkeeping, and other closely associated services. Proprietors and partners are excluded.

**Payroll**—This item includes all forms of compensation such as salaries, wages, commissions, dismissal pay, bonuses, vacation and sick leave pay, and compensation in kind, prior to such deductions as employees' Social Security contributions, withholding taxes, group insurance, union dues, and savings bonds. The total includes salaries of officers of these establishments, if a corporation; it excludes payments to the proprietor or partners, if an unincorporated concern. Respondents were told that in reporting they could follow the definition of payrolls used for calculating the Federal withholding tax.

**Man-Hours of Production Workers**—This total relates to production-worker man-hours worked or paid for at the plant including actual overtime hours (not straight-time equivalent hours). It excludes hours paid for vacation, holidays, or sick leave when the employee was not at the plant.

**Cost of Materials**—The term "Cost of Materials" refers to charges actually paid or payable for items consumed or put into production during the year, including freight and other direct charges incurred by the establishment in acquiring these materials. It includes the cost of materials or fuel consumed regardless of

whether these items were purchased by the establishment from other companies, transferred to it from other establishments of the same company, or withdrawn from inventory during the year. The establishment was requested to value materials transferred from other parts of the company at its approximate market value, not at cost of production. The important components of this cost item are (a) all raw materials, semifinished goods, parts, components, containers, scrap, and supplies put into production or used as operating supplies and for repair and maintenance during the year; (b) electric energy purchased; (c) fuels consumed for heat, power, or the generation of electricity; (d) work done by others on materials or parts furnished by manufacturing establishments (contract work); and (e) products bought and resold in the same condition.

**Value of Shipments**—The value of shipments is the received or receivable net selling value, f.o.b. plant (exclusive of freight and taxes), of all products shipped, both primary and secondary, as well as all miscellaneous receipts such as receipts for contract work performed for others, installation and repair, sales of scrap, and sale of products bought and resold without further processing. Included are all items made by the establishment or for it under contract from materials owned by it whether sold, transferred to other plants of the same company, or shipped on consignment. The net selling value of products made in one plant on a contract basis from materials owned by another was reported by the plant providing the materials.

In the case of multiunit companies, the manufacturer was requested to report the value of products transferred to other establishments of the same company at full economic value; i.e., to include not only the direct costs of production but also a reasonable proportion of "all other costs" (including company overhead) and profit.

**Duplication in Cost of Materials and Value of Products**—The aggregate cost of materials and value-of-shipments figures for industry groups and for all manufacturing industries may include large amounts of duplication since the products of some industries are used as materials by others. With some important exceptions, such as motor vehicles and parts, this duplication is not significant within individual industries but arises from the addition of the totals of related industries in successive stages of the production of a finished manufactured product. Examples are the addition of flour mills to bakeries in the food group and the addition of pulp mills to paper mills in the paper and allied products group of industries. Esti-



mates of this duplication indicate that the value of manufactured products exclusive of such duplication—the value of finished manufactures—approximates two-thirds of the total value of products.

Prior to 1962, the Bureau of the Census did not publish figures for cost of materials or value of shipments if they contained significant duplication. Effective with the 1962 annual survey these figures were shown at all industry levels for the United States to meet the requests for their use in studies in which the presence of an indeterminate amount of duplication is not a limiting factor. However, they are appropriately footnoted. Effective with the 1964 annual survey, these industry group totals are also shown at the State, standard metropolitan statistical area, and large-county level.

Even where there is no significant amount of duplication, value-of-shipments figures are deficient as measures of the relative economic importance of individual manufacturing industries or geographic areas because of the wide variation in ratio of materials, labor, and other processing costs to value of shipments among industries.

**Value Added by Manufacture**—This measure of manufacturing activity is derived by subtracting the cost of materials, supplies, containers, fuel, purchased electricity, and cost of resales contract work from the value of shipments for products manufactured plus resales and receipts for services rendered. The result of this calculation is adjusted by the net change in finished goods and work-in-process inventories between the beginning and end of the year. (In the few industries that report value of production rather than value of shipments, only changes in work-in-process inventories are used to adjust value added. In the shipbuilding and repairing industry, no inventory adjustment is made.)

“Value added” avoids the duplication in the value of shipments figure which results from the use of products of some establishments as materials by others. Value added is considered to be the best value measure available for comparing the relative economic importance of manufacturing among industries and geographic areas.

**Expenditures for Plant and Equipment**—Manufacturing establishments in operation and establishments under construction but not yet in operation, were asked to report their expenditures for (a) permanent additions and major alterations to the manufacturing establishment, and (b) new machinery and equipment used for replacement purposes and additions to plant capacity if they are of the type for which depreciation accounts are ordinarily maintained.

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<sup>1</sup> Each standard metropolitan statistical area must include either (1) a city with 50,000 or more inhabitants, or (2) a city having a population of at least 25,000 which (a) with the addition of the population of contiguous places has a population density of at least 1,000 persons per square mile; (b) constitutes, for general economic and social purposes, a single community with a combined population of at least 50,000; and (c) includes a total population of at least 75,000 in the county or counties in which the city and contiguous places are located.

SMSA's on a city and town basis because towns rather than counties are regarded as the significant unit in this region of the country.

The requirement that each SMSA consist of county units (except in New England) sometimes results in the inclusion in an area of considerable amount of territory which would not ordinarily be considered "metropolitan," much less "industrial." It is recognized that metropolitan areas could be more accurately defined in terms of smaller area segments such as minor civil

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The data for SMSA's which changed definition since the 1967 census have not been retabulated on the new basis for years prior to 1972.



# THE 1972 ECONOMIC CENSUSES

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## PRELIMINARY REPORT

1972 CENSUS OF  
MANUFACTURES

## AREA SERIES

C72(P)-S30

U. S. DEPARTMENT OF COMMERCE • Social and Economic Statistics Administration • BUREAU OF THE CENSUS

Issued April 1974

## New Hampshire

Value added by manufacturing in 1972 in the State of New Hampshire amounted to \$1,297 million, a 19-percent increase from 1971 and a 39-percent increase from 1967.

This report presents preliminary results from the 1972 Census of Manufactures for the State, its Standard Metropolitan Statistical Areas, and its counties.

Data are provided for industry groups within the State. Historical data, back to 1958, are included for the State as a whole,

and 1967 figures on employment and value added are provided for the smaller areas.

The figures in the report have been subjected to only preliminary review and must be regarded as approximations of the final census figures. No adjustments have been made in the value figures for changes in price level.

For an explanation of the terms used in the tables, see the appendix at the end of this report.

TABLE 1. General Statistics for the State: 1972 and Earlier Years

(See appendix, Explanation of Terms)

Year	Establishments		All employees <sup>1</sup>		Production workers			Value added by manufacture	Cost of materials <sup>2</sup>	Value of shipments <sup>2</sup>	Capital expenditures, new
	Total	With 20 employees or more	Number	Payroll	Number	Man-hours	Wages				
	(number)	(number)	(1,000)	(million dollars)	(1,000)	(millions)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(million dollars)
NEW HAMPSHIRE											
1972 Census .....	1,419	557	90.4	668.1	68.3	132.6	418.2	1,297.4	1,042.7	2,314.7	104.7
1971 ASM .....	(NA)	(NA)	81.9	576.4	60.0	117.4	356.2	1,088.7	926.3	2,021.2	79.7
1970 ASM .....	(NA)	(NA)	89.9	586.8	67.2	133.9	368.0	1,062.1	928.6	1,965.5	73.2
1969 ASM .....	(NA)	(NA)	94.4	567.7	75.9	149.8	394.4	1,006.8	921.9	1,929.8	102.4
1968 ASM .....	(NA)	(NA)	95.6	550.2	76.5	153.4	384.8	1,007.1	899.6	1,891.0	54.0
1967 Census .....	1,481	566	94.9	512.6	76.6	151.0	364.3	931.9	802.8	1,716.8	75.6
1966 ASM .....	(NA)	(NA)	96.3	483.7	78.0	156.5	345.3	866.1	776.9	1,636.3	72.5
1965 ASM .....	(NA)	(NA)	90.8	435.6	74.1	148.9	314.1	782.9	716.4	1,485.1	39.8
1964 ASM .....	(NA)	(NA)	85.0	398.2	69.3	138.3	284.6	688.2	672.0	1,352.5	40.5
1963 Census .....	1,509	546	84.1	378.9	68.6	135.1	271.8	636.1	(NA)	(NA)	30.3
1962 ASM .....	(NA)	(NA)	81.1	358.9	65.6	130.1	254.9	609.9	(NA)	(NA)	31.2
1961 ASM .....	(NA)	(NA)	81.0	345.9	66.5	131.2	248.7	588.8	(NA)	(NA)	28.6
1960 ASM .....	(NA)	(NA)	84.0	341.5	69.0	136.0	249.7	598.1	(NA)	(NA)	26.3
1959 ASM .....	(NA)	(NA)	86.5	341.2	72.0	142.4	254.5	578.2	(NA)	(NA)	25.0
1958 Census .....	1,457	494	79.5	297.1	65.6	128.1	221.1	490.7	(NA)	(NA)	24.4

Note: "ASM" data are based on a representative sample of manufacturing establishments canvassed in the Annual Survey of Manufactures. These estimates may differ from the results of a complete canvass of all manufacturing establishments. The standard errors associated with these estimates are published in the annual survey of manufactures volumes for this period. For comparative purposes, the 1972 ASM estimate for the State of Texas was 87 thousand employees, and \$1,265 million in value added with corresponding standard error of estimate of 3 and 3.

(NA) Not available.

<sup>1</sup>Includes employment and payroll at central administrative offices and auxiliary units. (For a definition of these units, see appendix.)

<sup>2</sup>The total cost of materials and value of shipments may include extensive duplication arising from shipments between establishments in the same industry classification. (For a more complete explanation, see appendix.)

TABLE 2. General Statistics for the State, Standard Metropolitan Statistical Areas, and Counties: 1972 and 1967

(See appendix, Explanation of Terms)

State, standard metropolitan statistical areas, and counties <sup>1</sup>	1972											1967	
	Establishments		All employees <sup>2</sup>		Production workers			Value added by manufacture	Cost of materials <sup>3</sup>	Value of shipments <sup>3</sup>	Capital expenditures, new	All employees	Value added by manufacture
	Total	With 20 employees or more	Number	Payroll	Number	Man-hours	Wages						
	(number)	(number)	(1,000)	(million dollars)	(1,000)	(million)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(1,000)	(million dollars)
NEW HAMPSHIRE, TOTAL . . . . .	1 419	557	90.4	668.1	68.3	132.6	418.2	1 297.4	1 042.7	2 314.7	104.7	94.9	931.9
STANDARD METROPOLITAN STATISTICAL AREAS <sup>4</sup>													
LAWRENCE-HAVERHILL . . . . .	522	209	36.7	316.2	26.4	49.3	179.8	692.9	526.1	1 196.8	46.0	39.9	435.4
PORTION IN NEW HAMPSHIRE . . . . .	48	14	1.5	10.8	1.1	1.8	6.5	19.9	20.8	39.9	1.6	.6	5.6
PORTION IN MASSACHUSETTS . . . . .	474	195	35.2	305.4	25.3	47.5	173.3	673.0	505.3	1 156.9	44.4	39.3	429.8
LOWELL . . . . .	326	141	22.9	183.7	16.9	32.5	115.4	480.4	306.8	785.6	20.0	(NA)	(NA)
MANCHESTER . . . . .	237	108	19.0	129.2	15.1	28.8	86.6	246.8	254.4	491.1	12.9	18.0	167.1
NASHUA . . . . .	195	88	18.3	164.2	10.1	19.9	67.2	320.7	277.6	546.3	29.8	(NA)	(NA)
COUNTIES													
BELKNAP . . . . .	78	32	3.9	26.8	3.1	6.4	18.6	53.7	22.1	75.7	4.1	3.8	33.3
CHESHIRE . . . . .	141	56	6.5	49.3	5.0	10.1	32.2	100.9	66.8	163.5	4.9	7.7	78.5
COOS . . . . .	88	19	3.8	28.5	3.1	6.6	22.4	38.6	87.4	126.5	12.6	4.6	48.9
GRAFTON . . . . .	96	35	5.5	37.0	4.7	8.9	27.2	58.9	45.4	103.8	9.3	5.3	53.6
HILLSBOROUGH . . . . .	444	200	37.8	295.5	25.5	49.4	155.4	570.0	481.1	1 040.3	42.8	40.0	409.2
MERRIMACK . . . . .	158	61	7.8	56.6	6.3	12.3	38.3	101.1	91.8	188.9	6.0	8.6	78.7
ROCKINGHAM . . . . .	195	64	9.1	65.0	7.4	13.2	46.0	122.6	102.2	230.6	9.5	7.6	68.0
STRAFFORD . . . . .	99	52	11.4	75.9	9.5	18.1	54.7	177.4	100.0	272.8	10.3	12.8	117.8
SULLIVAN . . . . .	73	26	3.8	28.1	3.0	6.1	19.9	62.6	36.6	99.9	4.2	3.8	38.6

(NA) Not available.

<sup>1</sup> Some counties were withheld from publication in order to (a) avoid disclosing figures for individual companies or (b) permit further checking of the figures for smaller counties. Additional detail will appear in the final report for this State.<sup>2</sup> Includes employment and payroll at central administrative offices and auxiliary units. (For a definition of these units, see appendix.)<sup>3</sup> The total cost of materials and value of shipments may include extensive duplication arising from shipments between establishments in the same industry classification. (For a more complete explanation, see appendix.)<sup>4</sup> The standard metropolitan statistical areas in this State are defined as follows:

LAWRENCE-HAVERHILL, MA-NH, SMSA: Consists of Lawrence and Haverhill cities, and Amesbury, Andover, Georgetown, Groveland, Merrimack, Methuen, North Andover, Salisbury, and West Newbury towns in Essex County, MA; and Atkinson, Hampstead, Kingston, Newton, Plaistow, Salem, and Windham towns in Rockingham County, NH.

LOWELL, MA-NH, SMSA: Consists of Lowell city, and Billerica, Chelmsford, Dracut, Tewksbury, Tyngsborough, and Westford towns in Middlesex County, MA; and Pelham town in Hillsborough County, NH.

MANCHESTER SMSA: Consists of Manchester city, and Bedford and Goffstown towns in Hillsborough County; Allenstown, Hooksett, and Pembroke towns in Merrimack County; and Derry and Londonderry towns in Rockingham County, NH.

NASHUA SMSA: Consists of Nashua city, and Amherst, Hudson, Merrimack, and Milford towns in Hillsborough County, NH.

TABLE 3. General Statistics for the State, by Industry Groups and Industries: 1972 and 1967

(See appendix, Explanation of Terms)

Code	Industry	1972											1967	
		Establishments		All employees		Production workers			Value added by manufacture	Cost of materials <sup>1</sup>	Value of shipments <sup>1</sup>	Capital expenditures, new	All employees	Value added by manufacture
		Total	With 20 employees or more	Number	Payroll	Number	Man-hours	Wages						
		(number)	(number)	(1,000)	(million dollars)	(1,000)	(million)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(1,000)	(million dollars)
	ALL INDUSTRIES, TOTAL <sup>2</sup> . . . . .	1 419	557	90.4	668.1	68.3	132.6	418.2	1 297.4	1 042.7	2 314.7	104.7	94.9	931.9
20	FOOD AND KINDRED PRODUCTS . . . . .	96	31	2.8	24.2	1.7	3.3	14.1	84.4	146.0	229.7	2.1	2.9	38.1
201	MEAT PRODUCTS . . . . .	13	5	.5	4.5	.4	.9	3.3	8.9	54.3	62.5	.1	CC	(0)
202	DAIRY PRODUCTS . . . . .	25	9	.6	4.1	.2	.4	1.4	11.8	20.0	31.9	.5	.9	11.8
2026	FLUID MILK . . . . .	20	7	.5	3.7	.2	.3	1.1	11.0	18.3	29.2	.5	.8	11.0
208	BEVERAGES . . . . .	16	8	.8	8.1	.4	.9	4.8	42.8	49.8	92.6	1.0	.6	6.7
22	TEXTILE MILL PRODUCTS . . . . .	62	40	7.5	45.1	6.4	12.6	36.1	91.9	89.1	176.5	5.1	10.1	83.7
2221	WEAVING MILLS, SYNTHETICS . . . . .	5	3	.8	4.9	.7	1.4	4.1	7.1	6.4	13.4	(Z)	1.1	13.6
2231	WEAVING AND FINISHING MILLS, WOOL . . . . .	7	6	1.3	9.0	1.2	2.7	7.6	16.7	11.8	28.1	.4	3.6	28.4
2241	NARROW FABRIC MILLS . . . . .	13	8	.7	4.1	.6	1.2	3.1	12.2	4.3	17.1	.4	.6	8.7
225	KNITTING MILLS . . . . .	10	10	2.2	11.2	1.8	3.3	9.0	26.0	40.6	61.7	1.2	2.2	12.7
2253	KNIT OUTERWEAR MILLS . . . . .	4	4	1.6	7.7	1.3	2.4	6.4	19.1	23.0	36.9	.4	1.4	8.0
23	APPAREL, OTHER TEXTILE PRODUCTS . . . . .	40	27	2.1	10.2	1.9	3.2	8.0	17.5	11.8	29.0	.6	1.9	12.0
233	WOMEN'S AND MISSES' OUTERWEAR . . . . .	14	11	.9	4.1	.8	1.4	3.4	6.3	4.4	10.8	.2	.5	2.8
2335	WOMEN'S AND MISSES' DRESSES . . . . .	5	3	.3	1.3	.3	.4	1.1	1.5	.1	1.5	(Z)	.2	1.3
239	MISC. FABRICATED TEXTILE PRODUCTS . . . . .	11	3	.3	1.4	.3	.4	1.0	2.9	1.1	3.9	(Z)	.4	2.8
24	LUMBER AND WOOD PRODUCTS . . . . .	256	55	4.4	27.5	3.7	7.1	20.6	48.2	61.1	108.2	6.3	(NA)	(NA)
2411	LOGGING CAMPS, LOGGING CONTRACTORS . . . . .	87	6	.7	4.0	.6	1.0	3.2	7.4	14.5	21.9	.9	.8	6.5
242	SAWMILLS AND PLANING MILLS . . . . .	84	9	.8	5.0	.7	1.3	3.6	9.8	11.0	21.1	1.4	1.0	8.3
2421	SAWMILLS AND PLANING MILLS, GENERAL . . . . .	77	9	.7	4.8	.6	1.2	3.4	9.1	10.4	19.8	1.3	.9	7.3
243	MILLWORK, FLYWOOD, STRUC. MEMBERS . . . . .	19	11	1.1	7.7	.9	1.5	5.4	14.4	17.3	30.6	2.2	(NA)	(NA)
2431	MILLWORK . . . . .	13	6	.7	4.7	.5	.9	3.0	7.0	9.5	16.1	1.8	(NA)	(NA)
244	WOOD CONTAINERS . . . . .	17	11	.6	3.0	.5	1.0	2.4	4.3	3.3	7.6	.4	(NA)	(NA)
2441	NAILED WOOD BOXES AND SHOOK . . . . .	9	7	.3	1.7	.3	.7	1.4	2.6	2.1	4.7	.2	.4	2.4
245	WOOD BUILDINGS AND MOBILE HOMES . . . . .	5	4	.4	2.9	.4	.7	2.1	5.0	9.4	14.2	.3	(NA)	(NA)
249	MISCELLANEOUS WOOD PRODUCTS . . . . .	45	15	1.0	5.7	.8	1.6	4.3	9.3	8.1	17.4	1.2	(NA)	(NA)

See footnotes at end of table.



TABLE 3. General Statistics for the State, by Industry Groups and Industries: 1972 and 1967—Continued

(See appendix, Explanation of Terms)

Code	Industry	1972											1967	
		Establishments		All employees		Production workers			Value added by manufacture	Cost of materials <sup>1</sup>	Value of shipments <sup>1</sup>	Capital expenditures, new	All employees	Value added by manufacture
		Total	With 20 employees or more	Number	Payroll	Number	Man-hours	Wages						
		(number)	(number)	(1,000)	(million dollars)	(1,000)	(million)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(1,000)	(million dollars)
25	FURNITURE AND FIXTURES . . . . .	42	22	2.0	13.4	1.7	3.4	8.9	24.8	19.4	42.0	0.9	2.1	17.7
251	HOUSEHOLD FURNITURE . . . . .	28	15	1.6	9.7	1.4	2.8	6.8	18.5	15.6	31.9	.7	(NA)	(NA)
2511	WOOD HOUSEHOLD FURNITURE . . . . .	18	12	1.4	8.7	1.3	2.5	6.2	16.6	13.1	27.5	.7	(NA)	(NA)
254	PARTITIONS AND FIXTURES . . . . .	8	3	.3	2.4	.2	.4	1.5	3.7	2.4	6.0	(Z)	.3	3.2
26	PAPER AND ALLIED PRODUCTS . . . . .	40	34	1.1	54.3	4.7	10.3	37.3	102.3	129.2	236.5	23.4	5.9	92.1
2621	PAPERMILLS, EXCEPT BUILDING PAPER . . . . .	14	11	3.0	26.2	2.5	5.7	20.1	32.9	71.4	104.0	18.7	2.6	41.0
2631	PAPERBOARD MILLS . . . . .	6	6	.3	2.3	.2	.5	1.6	5.0	3.4	8.4	.3	AA	(D)
264	MISC. CONVERTED PAPER PRODUCTS . . . . .	11	10	2.2	21.3	1.5	3.2	12.5	60.7	45.0	105.2	3.9	2.1	34.0
2648	STATIONERY PRODUCTS . . . . .	5	5	.3	1.5	.2	.4	1.1	3.4	5.7	8.8	.1	(NA)	(NA)
265	PAPERBOARD CONTAINERS AND BOXES . . . . .	9	7	.7	4.1	.5	.9	3.2	9.7	9.3	18.9	.4	.6	6.7
27	PRINTING AND PUBLISHING . . . . .	103	9	4.1	25.9	3.0	5.7	21.2	61.4	34.4	100.7	3.7	3.8	38.5
2711	NEWSPAPERS . . . . .	39	17	1.4	10.3	.7	1.3	5.2	18.8	3.7	22.6	1.1	1.2	13.0
275	COMMERCIAL PRINTING . . . . .	81	9	1.5	12.6	1.2	2.5	9.5	18.0	11.3	29.3	.9	(NA)	(NA)
2752	COMMERCIAL PRINTING, LITHOGRAPHIC . . . . .	28	6	1.2	9.7	1.0	1.9	7.5	13.6	8.8	22.5	.7	(NA)	(NA)
28	CHEMICALS AND ALLIED PRODUCTS . . . . .	23	4	.7	5.8	.5	1.0	3.4	13.1	21.0	33.5	1.2	.5	7.8
30	RUBBER AND MISC. PLASTICS PROD . . . . .	51	2	7.0	45.5	6.1	11.5	34.1	87.9	70.6	153.9	10.7	(NA)	(NA)
31	LEATHER AND LEATHER PRODUCTS . . . . .	9	13	13.8	70.7	12.3	21.7	60.1	125.8	129.3	255.8	4.6	19.6	132.5
314	FOOTWEAR, EXCEPT RUBBER . . . . .	51	41	11.6	61.6	10.4	17.9	48.7	100.1	88.1	189.8	3.5	17.1	112.2
3144	WOMEN'S FOOTWEAR, EXCEPT ATHLETIC . . . . .	34	2	8.4	43.2	7.5	12.9	34.1	67.4	59.3	125.9	2.6	(NA)	(NA)
32	STONE, CLAY, AND GLASS PRODUCTS . . . . .	69	24	1.8	14.2	1.3	2.8	10.0	32.0	23.3	54.7	3.4	1.8	25.4
329	MISC. NONMETALLIC MINERAL PRODUCTS . . . . .	11	4	.6	4.3	.5	.9	3.0	7.6	5.6	13.1	.3	(NA)	(NA)
33	PRIMARY METAL INDUSTRIES . . . . .	27	1	2.5	20.9	1.8	3.9	13.4	39.0	24.8	62.8	2.2	2.7	30.9
332	IRON AND STEEL FOUNDRIES . . . . .	7	5	.9	7.7	.6	1.4	4.1	13.5	4.4	18.0	.6	1.0	9.6
335	NONFERROUS ROLLING AND DRAWING . . . . .	7	6	.8	7.0	.5	1.1	4.1	14.8	14.0	28.1	1.3	.7	11.0
336	NONFERROUS FOUNDRIES . . . . .	6	3	.4	3.6	.4	.8	2.8	5.4	1.9	7.3	(D)	.6	5.8
3361	ALUMINUM FOUNDRIES . . . . .	6	3	.4	3.6	.4	.8	2.8	5.4	1.9	7.3	(D)	BB	(D)
34	FABRICATED METAL PRODUCTS . . . . .	94	33	3.4	29.9	2.8	5.4	19.2	70.1	47.0	116.3	4.4	(NA)	(NA)
344	FABRICATED STRUCTURAL METAL PROD . . . . .	41	14	1.5	13.5	1.1	2.2	7.9	19.8	25.2	44.0	(D)	.9	9.7
35	MACHINERY, EXCEPT ELECTRICAL . . . . .	160	52	9.8	86.1	7.1	14.9	54.0	183.3	79.8	254.7	19.2	10.9	129.1
354	METALWORKING MACHINERY . . . . .	37	14	1.4	13.6	1.0	2.3	8.7	27.7	12.4	38.6	1.4	1.3	20.7
355	SPECIAL INDUSTRY MACHINERY . . . . .	24	13	3.5	30.4	2.4	5.3	18.2	64.1	28.2	89.2	1.8	3.6	38.9
3552	TEXTILE MACHINERY . . . . .	5	4	1.3	9.3	1.0	2.4	6.8	21.7	5.0	27.7	.7	1.3	9.9
356	GENERAL INDUSTRIAL MACHINERY . . . . .	22	10	2.4	20.7	1.8	3.7	12.8	43.8	15.2	56.6	1.4	3.4	40.1
359	MISC. MACHINERY, EXCEPT ELECTRICAL . . . . .	64	7	.6	4.6	.5	1.0	3.5	7.6	2.4	9.8	.5	(NA)	(NA)
3599	MACHINERY, EXCEPT ELECTRICAL, NEC . . . . .	64	7	.6	4.6	.5	1.0	3.5	7.6	2.4	9.8	.5	(NA)	(NA)
36	ELECTRIC, ELECTRONIC EQUIPMENT . . . . .	75	39	12.7	107.9	1.3	12.1	35.9	172.8	25.9	261.7	7.7	(NA)	(NA)
362	ELECTRICAL INDUSTRIAL APPARATUS . . . . .	8	3	.3	2.4	.3	.5	1.6	4.7	2.9	7.5	.5	CC	(D)
367	ELECTRONIC COMPONENTS AND ACCESS . . . . .	28	18	6.2	48.9	3.4	6.9	18.0	56.5	27.8	82.9	2.9	5.6	45.1
3679	ELECTRONIC COMPONENTS, NEC . . . . .	18	10	2.6	16.8	1.9	3.7	9.6	30.3	14.6	43.8	1.2	(NA)	(NA)
37	TRANSPORTATION EQUIPMENT . . . . .	20	6	1.8	14.6	1.6	3.0	11.6	25.5	18.5	42.9	2.3	(NA)	(NA)
38	INSTRUMENTS AND RELATED PRODUCTS . . . . .	39	19	4.6	34.3	3.5	6.8	20.6	82.7	33.8	113.1	2.9	(NA)	(NA)
39	MISC. MANUFACTURING INDUSTRIES . . . . .	52	14	1.9	11.8	1.6	3.0	9.1	19.9	12.7	33.5	3.7	1.5	11.5
394	TOYS AND SPORTING GOODS . . . . .	17	5	.4	4.0	.7	1.3	3.5	5.5	3.4	10.2	3.2	.6	4.6
399	MISCELLANEOUS MANUFACTURES . . . . .	22	5	.8	5.7	.6	1.2	3.9	10.1	7.7	17.4	.2	.7	4.9
--	ADMINISTRATIVE AND AUXILIARY . . . . .	16	8	.8	8.5	-	-	-	-	-	-	-	.3	-

Note: The following symbols indicate employment size range for 1967:

AA less than 250 employees      EE 1,000 to 2,499 employees  
BB 250 to 499 employees      FF 2,500 employees and over  
CC 500 to 999 employees

- Represents zero. (NA) Not available. Because of a revision to this industry or industry group in the 1972 edition of the SIC manual, 1967 census data are not available on a comparable basis. (D) Withheld to avoid disclosing figures for individual companies. (Z) Less than half of the unit of measurement shown.

<sup>1</sup>The total cost of materials and value of shipments for industry groups shown may include extensive duplication arising from shipments between establishments in the same industry classification. (For a more complete explanation, see appendix.)

<sup>2</sup>Includes figures for industry groups which have been withheld from publication in order to (a) avoid disclosing figures for individual companies or (b) permit further checking of figures for smaller industry groups. Additional detail will appear in the final report for this State.

## Appendix A. SCOPE AND COVERAGE

This report is one of a series presenting preliminary information, by State, from the 1972 Census of Manufactures. The data will be superseded in a final report which, in turn, will be included in *Volume III, Area Statistics, 1972 Census of Manufactures*. The final report will include a comprehensive discussion of the concepts and definitions used in the census.

The census of manufactures covers each manufacturing establishment in the United States with one paid employee or more; manufacturing establishments with no employees are excluded. Firms which operated more than one establishment were required to file a separate report for each location. Companies which engaged in distinctly different lines of activity at one location were asked to submit separate reports if the company records permitted such a separation and the activities were of significant size.

This report includes figures for administrative offices, warehouses, garages, or other auxiliary units which service manufacturing establishments.

In the 1972 census, the approximately 120,000 manufacturing establishments with fewer than 10 employees were excused from filing reports. Under special arrangements which safeguarded the confidentiality of both tax and census records, data on payrolls, sales, and industry classification from the administrative records of the Social Security Administration and the Internal Revenue Service were made available to the Census Bureau for use in the 1972 Economic Censuses (retail and wholesale trade, service industries, construction industries, manufactures, and mineral industries). Estimates for data other than payrolls and sales for these small establishments were constructed from industry averages. The effect on industry aggregates is slight in most industries. For manufacturing as a whole, these small establishments account for less than 3 percent of the payrolls and value added.

Establishments are classified by industry in accordance with industry definitions described in the 1972 edition of the Standard Industrial Classification (SIC) Manual. For 1972, the SIC was significantly revised and the comparability with prior year's data for some industries was significantly affected. The comparability at the 2- and 3-digit SIC levels was less affected. The final volumes of the 1972 Census of Manufactures will contain a table relating aggregates based on the 1972 SIC with aggregates derived from classifying establishments according to the 1967 SIC definitions.

As in earlier censuses, a number of small establishments may have been misclassified as to industry. However, such possible misclassifications have significant effect on *none* of the statistics except the number of establishments. As indicated above, report forms were not mailed to very small establishments (fewer than 10 employees). The industry classifications for these establishments were assigned on the basis of brief descriptions of the general activity of the establishment. Where the description is incomplete or there are relatively fine lines of demarcation among industries or between manufacturing and nonmanufacturing activity, the code assigned to an establishment could differ from that which would have been assigned on the basis of more complete product information. Therefore, the total establishment count for individual industries should be viewed as an approximation rather than a precise measurement. The counts for establishments with 20 employees or more are more reliable than the total number of establishments.

More detailed figures for this State will appear in the final census reports. Final reports will also include a comprehensive discussion of such concepts as "industry" and "establishment," as well as the various statistical items such as "employment," "value of shipments," and "value added." Similar preliminary and final reports will be issued for other States during the coming months. A series of preliminary summary reports showing U.S. totals for each manufacturing industry and for each State are being issued. Final industry reports and final area reports will be published during 1974.

Order forms describing the individual reports and listing their prices may be obtained from any U.S. Department of Commerce district office or from the Publications Distribution Section, Social and Economic Statistics Administration, Washington, D.C. 20233.

The 1972 Census of Manufactures is the 29th census of manufacturing establishments in the United States. For 1972, it was conducted jointly with the censuses of mineral industries, construction industries, retail trade, wholesale trade, and selected services under authority of Title 13 of the United States Code. Title 13 specifies that a census of manufactures be conducted every 5 years and, as amended, to cover years ending in "2" and "7". Title 13 also authorizes an annual sample survey of manufacturing establishments in interim years.



## Appendix B. EXPLANATION OF TERMS

*(For a more complete discussion of these terms and the method of compiling the Census of Manufactures, see the "Introduction" to the 1967 Census of Manufactures, Volume III).*

**All Employees**—All full-time and part-time employees on the payrolls of operating manufacturing establishments for any part of the pay period ending nearest the 12th of the months specified on the report form. Included are all persons on paid sick leave, paid holidays, and paid vacations during these pay periods. Officers of corporations are included as employees; proprietors and partners of unincorporated firms are excluded. The "all employee" number is the average number of production workers for the midmonth payroll period of March, May, August, and November plus the number of nonproduction employees in mid-March.

**Number of Production Workers**—Workers (up through the working foreman level) engaged in fabricating, processing, assembling, inspecting, receiving, packing, warehousing, shipping (but not delivering), and maintenance, repair, janitorial, and watchman services, product development, auxiliary production for plant's own use (e.g., powerplant), recordkeeping, and other closely associated services. Proprietors and partners are excluded.

**Payroll**—This item includes all forms of compensation such as salaries, wages, commissions, dismissal pay, bonuses, vacation and sick leave pay, and compensation in kind, prior to such deductions as employees' Social Security contributions, withholding taxes, group insurance, union dues, and savings bonds. The total includes salaries of officers of these establishments, if a corporation; it excludes payments to the proprietor or partners, if an unincorporated concern. Respondents were told that in reporting they could follow the definition of payrolls used for calculating the Federal withholding tax.

**Man-Hours of Production Workers**—This total relates to production-worker man-hours worked or paid for at the plant including actual overtime hours (not straight-time equivalent hours). It excludes hours paid for vacation, holidays, or sick leave when the employee was not at the plant.

**Cost of Materials**—The term "Cost of Materials" refers to charges actually paid or payable for items consumed or put into production during the year, including freight and other direct charges incurred by the establishment in acquiring these materials. It includes the cost of materials or fuel consumed regardless of

whether these items were purchased by the establishment from other companies, transferred to it from other establishments of the same company, or withdrawn from inventory during the year. The establishment was requested to value materials transferred from other parts of the company at its approximate market value, not at cost of production. The important components of this cost item are (a) all raw materials, semifinished goods, parts, components, containers, scrap, and supplies put into production or used as operating supplies and for repair and maintenance during the year; (b) electric energy purchased; (c) fuels consumed for heat, power, or the generation of electricity; (d) work done by others on materials or parts furnished by manufacturing establishments (contract work); and (e) products bought and resold in the same condition.

**Value of Shipments**—The value of shipments is the received or receivable net selling value, f.o.b. plant (exclusive of freight and taxes), of all products shipped, both primary and secondary, as well as all miscellaneous receipts such as receipts for contract work performed for others, installation and repair, sales of scrap, and sale of products bought and resold without further processing. Included are all items made by the establishment or for it under contract from materials owned by it whether sold, transferred to other plants of the same company, or shipped on consignment. The net selling value of products made in one plant on a contract basis from materials owned by another was reported by the plant providing the materials.

In the case of multiunit companies, the manufacturer was requested to report the value of products transferred to other establishments of the same company at full economic value; i.e., to include not only the direct costs of production but also a reasonable proportion of "all other costs" (including company overhead) and profit.

**Duplication in Cost of Materials and Value of Products**—The aggregate cost of materials and value-of-shipments figures for industry groups and for all manufacturing industries may include large amounts of duplication since the products of some industries are used as materials by others. With some important exceptions, such as motor vehicles and parts, this duplication is not significant within individual industries but arises from the addition of the totals of related industries in successive stages of the production of a finished manufactured product. Examples are the addition of flour mills to bakeries in the food group and the addition of pulp mills to paper mills in the paper and allied products group of industries. Esti-



mates of this duplication indicate that the value of manufactured products exclusive of such duplication—the value of finished manufactures—approximates two-thirds of the total value of products.

Prior to 1962, the Bureau of the Census did not publish figures for cost of materials or value of shipments if they contained significant duplication. Effective with the 1962 annual survey these figures were shown at all industry levels for the United States to meet the requests for their use in studies in which the presence of an indeterminate amount of duplication is not a limiting factor. However, they are appropriately footnoted. Effective with the 1964 annual survey, these industry group totals are also shown at the State, standard metropolitan statistical area, and large-county level.

Even where there is no significant amount of duplication, value-of-shipments figures are deficient as measures of the relative economic importance of individual manufacturing industries or geographic areas because of the wide variation in ratio of materials, labor, and other processing costs to value of shipments among industries.

**Value Added by Manufacture**—This measure of manufacturing activity is derived by subtracting the cost of materials, supplies, containers, fuel, purchased electricity, and cost of resales contract work from the value of shipments for products manufactured plus resales and receipts for services rendered. The result of this calculation is adjusted by the net change in finished goods and work-in-process inventories between the beginning and end of the year. (In the few industries that report value of production rather than value of shipments, only changes in work-in-process inventories are used to adjust value added. In the shipbuilding and repairing industry, no inventory adjustment is made.)

"Value added" avoids the duplication in the value of shipments figure which results from the use of products of some establishments as materials by others. Value added is considered to be the best value measure available for comparing the relative economic importance of manufacturing among industries and geographic areas.

**Expenditures for Plant and Equipment**—Manufacturing establishments in operation and establishments under construction but not yet in operation, were asked to report their expenditures for (a) permanent additions and major alterations to the manufacturing establishment, and (b) new machinery and equipment used for replacement purposes and additions to plant capacity if they are of the type for which depreciation accounts are ordinarily maintained.

These totals exclude expenditures for new facilities and equipment leased from nonmanufacturing concerns; new facilities owned by the Federal Government but operated under contract by private companies; and plant and equipment furnished to the manufacturer by communities and nonprofit organizations. Expenditures for used plant and equipment (although reported in the census), expenditures for land, and cost of maintenance and repairs charged as current operating expense are also omitted from the figures for new capital expenditures.

**Central Administrative Offices and Auxiliary Units**—In the 1972 census as in previous years, respondents were asked to file separate reports for central administrative offices or auxiliary units which were (1) at different locations from the establishments served or, (2) at the same location as one of these establishments but were not operated as an integral part thereof and served two or more establishments. The functions of employees in central administrative offices include general company policy determination, planning and management (that is, company purchasing, accounting, general engineering, direction of company personnel matters, and legal and patent matters). Auxiliaries are storage facilities, garages, repair shops, purchasing offices, sales promotion offices, and research laboratories serving the plants or central management of the company.

**Standard Metropolitan Statistical Areas**—Standard metropolitan statistical areas (SMSA) are integrated economic and social units with a large volume of daily travel and communication between the central city and outlying parts of the area.<sup>1</sup> Each area (except in New England) consists of one whole county or more. An area may contain not only highly industrialized counties but also adjoining counties which, though primarily residential in character, contribute significantly to the industrial counties' labor force and are socially and economically integrated with the central city. These areas are defined by the Federal Committee on Standard Metropolitan Statistical Areas of the Office of Management and Budget for general-purpose use throughout the Federal Government in presenting economic and social data. In the New England States, similar intergration criteria are applied in defining

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<sup>1</sup> Each standard metropolitan statistical area must include either (1) a city with 50,000 or more inhabitants, or (2) a city having a population of at least 25,000 which (a) with the addition of the population of contiguous places has a population density of at least 1,000 persons per square mile; (b) constitutes, for general economic and social purposes, a single community with a combined population of at least 50,000; and (c) includes a total population of at least 75,000 in the county or counties in which the city and contiguous places are located.



SMSA's on a city and town basis because towns rather than counties are regarded as the significant unit in this region of the country.

The requirement that each SMSA consist of county units (except in New England) sometimes results in the inclusion in an area of considerable amount of territory which would not ordinarily be considered "metropolitan," much less "industrial." It is recognized that metropolitan areas could be more accurately defined in terms of smaller area segments such as minor civil

divisions, but the usefulness of areas so defined would be limited by the fact that many types of economic and social data are available only on a county basis.

Each SMSA is designated by the name of the principal city of the area. In addition to the name of the principal city, the area title may include one or two additional city names.

The data for SMSA's which changed definition since the 1967 census have not been retabulated on the new basis for years prior to 1972.

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# PRELIMINARY REPORT

# 1972 CENSUS OF MANUFACTURES

## AREA SERIES

C72(P)-S31

Issued April 1974

U. S. DEPARTMENT OF COMMERCE • Social and Economic Statistics Administration • BUREAU OF THE CENSUS

## New Jersey

Value added by manufacturing in 1972 in the State of New Jersey amounted to \$16,319 million, a 13-percent increase from 1971 and a 28-percent increase from 1967.

This report presents preliminary results from the 1972 Census of Manufactures for the State, its Standard Metropolitan Statistical Areas, and its counties.

Data are provided for industry groups within the State. Historical data, back to 1958, are included for the State as a whole,

and 1967 figures on employment and value added are provided for the smaller areas.

The figures in this report have been subjected to only preliminary review and must be regarded as approximations of the final census figures. No adjustments have been made in the value figures for changes in price level.

For an explanation of the terms used in the tables, see the appendix at the end of this report.

TABLE 1. General Statistics for the State: 1972 and Earlier Years

(See appendix, Explanation of Terms)

Year	Establishments		All employees <sup>1</sup>		Production workers			Value added by manufacture	Cost of materials <sup>2</sup>	Value of shipments <sup>2</sup>	Capital expenditures, new
	Total	With 20 employees or more	Number	Payroll	Number	Man-hours	Wages				
	(number)	(number)	(1,000)	(million dollars)	(1,000)	(millions)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(million dollars)
NEW JERSEY											
1972 Census .....	14,949	5,830	842.7	8,120.5	547.4	1,068.3	4,343.0	16,318.6	16,070.6	32,248.0	931.9
1971 ASM .....	(NA)	(NA)	796.5	7,258.2	517.4	1,023.5	3,880.9	14,393.8	14,540.0	28,953.4	798.4
1970 ASM .....	(NA)	(NA)	858.8	7,217.2	563.6	1,116.5	3,877.6	14,413.8	14,204.7	28,503.2	902.3
1969 ASM .....	(NA)	(NA)	890.0	7,091.8	596.7	1,183.9	3,938.4	14,362.1	14,574.5	28,835.9	933.2
1968 ASM .....	(NA)	(NA)	874.3	6,433.4	591.1	1,173.6	3,743.4	13,503.4	13,696.0	27,163.9	764.5
1967 Census .....	14,740	5,903	881.3	6,325.4	603.7	1,203.7	3,617.8	12,738.2	13,151.2	25,761.7	824.3
1966 ASM .....	(NA)	(NA)	876.5	6,046.7	604.5	1,218.8	3,506.0	12,246.3	12,961.5	24,941.2	776.4
1965 ASM .....	(NA)	(NA)	845.2	5,601.9	585.9	1,180.5	3,282.4	11,267.9	12,076.6	23,156.2	617.6
1964 ASM .....	(NA)	(NA)	820.8	5,274.7	562.2	1,135.2	3,087.9	10,216.6	11,041.5	21,225.6	502.2
1963 Census .....	15,208	5,528	829.2	5,121.3	573.8	1,145.4	3,021.0	9,957.3	(NA)	(NA)	525.0
1962 ASM .....	(NA)	(NA)	805.2	4,779.1	566.6	1,128.1	2,927.9	9,494.6	(NA)	(NA)	532.6
1961 ASM .....	(NA)	(NA)	796.7	4,539.1	557.9	1,100.3	2,765.4	8,757.6	(NA)	(NA)	467.6
1960 ASM .....	(NA)	(NA)	813.8	4,473.9	581.7	1,147.1	2,775.8	8,631.9	(NA)	(NA)	472.6
1959 ASM .....	(NA)	(NA)	812.5	4,367.5	584.6	1,159.0	2,727.5	8,353.9	(NA)	(NA)	436.4
1958 Census .....	14,219	4,994	795.0	4,066.5	564.2	1,101.0	2,508.1	7,499.5	(NA)	(NA)	449.7

Note: "ASM" data are based on a representative sample of manufacturing establishments canvassed in the Annual Survey of Manufactures. These estimates may differ from the results of a complete canvass of all manufacturing establishments. The standard errors associated with these estimates are published in the annual survey of manufactures volumes for this period. For comparative purposes, the 1972 ASM estimate for the State of New Jersey was 790 thousand employees, and \$15,727 million in value added with corresponding standard error of estimate of 1 and 1.

(NA) Not available.

<sup>1</sup>Includes employment and payroll at central administrative offices and auxiliary units. (For a definition of these units, see appendix.)

<sup>2</sup>The total cost of materials and value of shipments may include extensive duplication arising from shipments between establishments in the same industry classification. (For a more complete explanation, see appendix.)

TABLE 2. General Statistics for the State, Standard Metropolitan Statistical Areas, and Counties: 1972 and 1967

(See appendix, Explanation of Terms)

State, standard metropolitan statistical areas, and counties <sup>1</sup>	1972										1967		
	Establishments		All employees <sup>2</sup>		Production workers			Value added by manufac- ture	Cost of materials <sup>3</sup>	Value of shipments <sup>3</sup>	Capital expendi- tures, new	All employees	Value added by manufac- ture
	Total	With 20 employees or more	Number	Payroll	Number	Man-hours	Wages						
	(number)	(number)	(1,000)	(million dollars)	(1,000)	(million)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(1,000)	(million dollars)
NEW JERSEY: TOTAL . . . . .	14 949	5 830	842.7	8 120.7	547.4	1 068.3	4 343.0	16 318.6	16 070.6	32 248.0	931.9	881.3	12 738.2
NEW YORK-NY-NORTHEASTERN NEW JERSEY STANDARD CONSOLIDATED AREA . . . .	41 675	14 297	16 655	157 737	10 398	19 922	76 106	291 424	282 436	569 793	(D)	18 197	237 814
STANDARD METROPOLITAN STATISTICAL AREAS <sup>4</sup>													
ALLENTOWN-BETHLEHEM-EASTON . . . . .	1 079	614	109.6	968.8	80.4	148.6	590.1	1 779.1	1 754.9	3 515.2	161.3	110.1	1 147.9
PORTION IN NEW JERSEY . . . . .	136	68	14.2	141.3	9.9	20.0	85.6	336.8	380.6	730.5	49.0	13.1	168.0
PORTION IN PENNSYLVANIA . . . . .	943	546	95.4	827.5	70.5	128.6	504.5	1 442.3	1 374.3	2 784.7	112.3	97.0	979.9
ATLANTIC CITY . . . . .	227	75	10.2	74.9	8.2	15.5	54.9	224.9	95.4	316.6	8.9	10.2	150.1
JERSEY CITY . . . . .	1 906	743	96.3	855.6	72.0	138.2	552.2	1 918.0	2 034.5	3 932.4	89.6	107.2	1 584.9
LONG BRANCH-ASBURY PARK . . . . .	550	186	25.9	233.9	16.0	30.4	104.0	463.8	286.1	731.7	27.0	24.9	259.5
NEW BRUNSWICK-PERTH AMBOY-SAYREVILLE . . . . .	972	510	82.0	831.1	53.6	106.6	462.2	1 978.7	2 400.5	4 336.7	116.2	81.6	1 472.5
NEW YORK . . . . .	28 249	9 355	961.2	8 841.0	590.4	1 111.0	4 005.5	15 330.4	15 250.9	30 438.1	586.0	1 091.0	13 056.9
PORTION IN NEW YORK . . . . .	25 852	8 518	850.0	7 786.4	522.7	982.8	3 490.1	13 402.5	13 208.9	26 483.8	482.8	983.8	11 587.5
PORTION IN NEW JERSEY <sup>5</sup> . . . . .	2 397	837	111.2	1 054.6	67.7	128.2	515.4	1 927.9	2 042.0	3 954.3	103.2	107.2	1 469.4
NEWARK . . . . .	4 558	1 719	271.7	2 794.0	158.0	313.2	1 296.3	5 602.9	5 043.0	10 581.3	267.9	292.3	4 400.2
PATERSON-CLIFTON-PASSAIC . . . . .	1 581	662	76.9	682.1	55.1	108.6	408.6	1 180.7	1 060.3	2 251.8	(D)	82.8	1 037.2
PHILADELPHIA . . . . .	7 735	3 044	501.3	4 816.1	332.7	647.3	2 730.6	9 242.7	9 848.9	19 046.5	562.7	573.8	7 958.8
PORTION IN NEW JERSEY . . . . .	1 361	525	70.1	683.8	46.3	90.7	389.7	1 245.8	1 442.7	2 694.3	112.0	75.4	1 052.2
PORTION IN PENNSYLVANIA . . . . .	6 374	2 519	431.2	4 132.3	286.4	556.6	2 340.9	7 996.9	8 406.2	16 352.2	450.7	498.4	6 906.5
TRENTON . . . . .	445	185	35.0	350.7	22.6	46.0	189.9	608.0	440.1	1 045.1	28.2	38.1	524.0
VINELAND-MILLVILLE-BRIDGETON . . . . .	227	110	22.3	167.1	18.7	35.6	128.8	315.1	254.5	565.7	23.8	24.1	254.1
WILMINGTON . . . . .	487	211	64.9	772.9	33.0	64.8	305.6	1 168.2	2 037.0	3 209.1	89.1	67.9	846.0
PORTION IN NEW JERSEY . . . . .	56	28	10.8	122.9	7.8	14.8	76.4	306.1	329.9	638.4	23.8	10.7	185.5
PORTION IN DELAWARE . . . . .	377	155	50.4	622.6	22.4	44.5	211.8	809.5	1 642.9	2 454.9	62.7	53.1	619.7
PORTION IN MARYLAND . . . . .	54	28	3.7	27.4	2.8	5.5	17.4	52.6	64.2	115.8	2.6	4.1	40.8
COUNTIES													
ATLANTIC . . . . .	227	75	10.2	74.9	8.2	15.5	54.9	224.9	95.4	316.6	8.9	10.2	150.1
BERGEN . . . . .	2 397	837	111.2	1 054.6	67.7	128.2	515.4	1 927.9	2 042.0	3 954.3	103.2	107.2	1 469.4
BURLINGTON . . . . .	368	142	21.6	211.6	14.3	28.3	124.8	400.0	367.4	772.2	37.2	19.6	269.4
CAMDEN . . . . .	754	292	36.2	362.8	23.5	45.8	198.6	637.1	684.8	1 324.6	36.5	43.7	590.5
CAPE MAY . . . . .	64	14	1.3	8.7	1.1	1.8	6.3	15.9	11.2	26.9	3.5	1.4	13.9
CUMBERLAND . . . . .	227	110	22.3	167.1	18.7	35.6	128.8	315.1	254.5	565.7	23.8	24.1	254.1
ESSEX . . . . .	2 128	750	103.1	1 002.9	63.9	124.0	496.0	1 896.7	1 594.9	3 458.6	82.3	123.6	1 762.9
GLOUCESTER . . . . .	239	91	12.3	109.4	8.5	16.6	66.3	208.7	390.5	597.5	38.3	12.1	192.3
HUDSON . . . . .	1 906	743	96.3	855.6	72.0	138.2	552.2	1 918.0	2 034.5	3 932.4	89.6	107.2	1 584.9
HUNTERDON . . . . .	112	47	4.3	37.6	3.1	6.5	24.3	67.4	134.5	201.5	7.8	5.3	80.5
MERCER . . . . .	445	185	35.0	350.7	22.6	46.0	189.9	608.0	440.1	1 045.1	28.2	38.1	524.0
MIDDLESEX . . . . .	972	510	82.0	831.1	53.6	106.6	462.2	1 978.7	2 400.5	4 336.7	116.2	81.6	1 472.5
MONMOUTH . . . . .	550	186	25.9	233.9	16.0	30.4	104.0	463.8	286.1	731.7	27.0	24.9	259.5
MORRIS . . . . .	656	240	42.4	455.3	20.1	40.2	160.2	837.9	515.3	1 336.1	39.7	38.4	546.0
OCEAN . . . . .	192	50	5.3	42.5	4.0	7.8	28.0	80.2	82.8	162.9	7.1	3.8	49.2
PASSAIC . . . . .	1 581	662	76.9	682.1	55.1	108.6	408.6	1 180.7	1 060.3	2 251.8	(D)	82.8	1 037.2
SALEM . . . . .	56	28	10.8	122.9	7.8	14.8	76.4	306.1	329.9	638.4	23.8	10.7	185.5
SOMERSET . . . . .	268	110	24.2	261.7	12.5	26.5	114.1	590.2	375.4	957.4	31.0	28.6	329.1
SUSSEX . . . . .	89	28	3.6	29.8	2.3	4.5	14.4	40.5	30.2	69.7	3.8	3.3	37.1
UNION . . . . .	1 506	619	102.0	1 074.1	61.5	122.5	526.0	2 278.1	2 557.4	4 829.2	114.9	101.7	1 762.2
WARREN . . . . .	136	68	14.2	141.3	9.9	20.0	85.6	336.8	380.6	730.5	49.0	13.1	168.0

(D) Withheld to avoid disclosing figures for individual companies.

<sup>1</sup>Some counties were withheld from publication in order to (a) avoid disclosing figures for individual companies or (b) permit further checking of the figures for smaller counties.

Additional detail will appear in the final report for this State.

<sup>2</sup>Includes employment and payroll at central administrative offices and auxiliary units. (For a definition of these units, see appendix.)<sup>3</sup>The total cost of materials and value of shipments may include extensive duplication arising from shipments between establishments in the same industry classification. (For a more complete explanation, see appendix.)<sup>4</sup>The standard consolidated area and standard metropolitan statistical areas are defined as follows:

NEW YORK, NY-NORTHEASTERN NEW JERSEY SCA: Consists of New York, NY-NJ, SMSA; Nassau-Suffolk, NY, SMSA; Newark, NJ, SMSA (Essex, Morris, Somerset, and Union Counties); Jersey City, NJ, SMSA (Hudson County); Paterson-Clifton-Passaic, NJ, SMSA (Passaic County); and New Brunswick-Perth Amboy-Sayreville, NJ, SMSA (Middlesex County).

ALLENTOWN-BETHLEHEM-EASTON, PA-NJ, SMSA: Consists of Carbon, Lehigh, and Northampton Counties, PA, and Warren County, NJ.

ATLANTIC CITY SMSA: Coextensive with Atlantic County, NJ.

JERSEY CITY SMSA: Coextensive with Hudson County, NJ.

LONG BRANCH-ASBURY PARK SMSA: Coextensive with Monmouth County, NJ.

NEW BRUNSWICK-PERTH AMBOY-SAYREVILLE SMSA: Coextensive with Middlesex County, NJ.

NEW YORK, NY-NJ, SMSA: Consists of Bronx, Kings, New York, Putnam, Queens, Richmond, Rockland, and Westchester Counties, NY, and Bergen County, NJ.

NEWARK SMSA: Consists of Essex, Morris, Somerset, and Union Counties, NJ.

PATERSON-CLIFTON-PASSAIC SMSA: Coextensive with Passaic County, NJ.

PHILADELPHIA, PA-NJ, SMSA: Consists of Bucks, Chester, Delaware, Montgomery, and Philadelphia Counties, PA, and Burlington, Camden and Gloucester Counties, NJ.

TRENTON SMSA: Coextensive with Mercer County, NJ.

VINELAND-MILLVILLE-BRIDGETON SMSA: Coextensive with Cumberland County, NJ.

WILMINGTON, DE-NJ-MD, SMSA: Consists of New Castle County, DE; Salem County, NJ; and Cecil County, MD.

<sup>5</sup>The New Jersey portion of the New York SMSA has been revised since the publication of the New York preliminary State report.



TABLE 3. General Statistics for the State, by Industry Groups and Industries: 1972 and 1967

(See appendix, Explanation of Terms)

Code	Industry	1972											1967	
		Establishments		All employees		Production workers			Value added by manufacture	Cost of materials <sup>1</sup>	Value of shipments <sup>1</sup>	Capital expenditures, 1966-1967	All employees	Value added by manufacture
		Total	With 20 employees or more	Number	Payroll	Number	Man-hours	Wages						
		(number)	(number)	(1,000)	(million dollars)	(1,000)	(million)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(1,000)	(million dollars)	
	ALL INDUSTRIES, TOTAL <sup>2</sup>	14 949	5 830	842.7	8 120.5	547.4	1 068.3	4 343.0	16 318.6	16 070.6	32 248.0	931.9	881.3	12 738.2
20	FOOD AND KINDRED PRODUCTS	862	386	54.7	513.4	38.9	77.3	329.2	1 544.9	2 363.3	3 895.3	87.7	60.5	1 256.5
201	MEAT PRODUCTS	115	50	5.2	48.6	3.9	8.2	33.0	111.7	397.7	509.1	4.5	4.9	70.2
2011	MEATPACKING PLANTS	35	9	1.2	11.2	1.0	2.0	9.0	50.0	184.8	235.1	.6	1.3	23.2
2013	SAUSAGES AND OTHER PREPARED MEATS	59	29	3.0	30.9	2.0	4.4	19.2	45.2	154.0	198.7	2.5	3.0	41.5
202	DAIRY PRODUCTS	90	46	3.1	30.8	1.6	3.1	14.6	71.7	213.3	284.2	5.6	4.7	75.1
2024	ICE CREAM AND FROZEN DESSERTS	22	8	.6	6.9	.4	.6	3.6	14.0	19.9	34.1	1.5	.8	13.7
2026	FLUID MILK	52	32	2.1	21.4	.9	2.0	9.6	50.6	166.7	217.0	2.9	3.4	55.6
203	PRESERVED FRUITS AND VEGETABLES	95	50	10.0	79.7	8.3	15.9	59.6	190.9	346.9	537.9	16.1	(NA)	(NA)
2033	CANNED FRUITS AND VEGETABLES	34	21	2.7	16.9	2.2	3.8	11.7	51.3	97.8	149.3	5.4	2.4	34.5
2038	FROZEN SPECIALTIES	25	15	1.6	9.8	1.4	2.6	7.6	22.0	21.2	43.2	.9	(NA)	(NA)
204	GRAIN MILL PRODUCTS	31	13	1.0	8.0	.8	1.6	5.1	33.5	62.0	93.1	2.0	1.3	25.1
205	BAKERY PRODUCTS	187	72	12.6	111.4	9.3	19.0	77.1	292.0	209.3	500.7	21.5	13.5	211.4
2051	BREAD, CAKE, AND RELATED PRODUCTS	161	58	7.8	68.8	5.0	9.8	43.1	153.0	113.7	266.5	19.2	7.6	98.9
2052	COOKIES AND CRACKERS	26	14	4.9	42.6	4.3	9.1	34.1	139.1	95.6	234.3	2.4	5.9	112.5
206	SUGAR AND CONFECTIONERY PRODUCTS	57	23	3.8	38.0	2.6	5.1	19.8	95.2	123.9	216.5	6.1	(NA)	(NA)
2065	CONFECTIONERY PRODUCTS	49	17	3.2	32.2	2.1	4.2	16.1	77.6	85.4	163.4	4.0	3.8	63.6
207	FATS AND OILS	30	18	2.2	23.6	1.6	3.5	16.2	73.4	163.8	231.8	6.9	(NA)	(NA)
208	BEVERAGES	137	63	9.1	97.4	5.2	9.6	53.0	310.6	362.7	675.8	12.5	11.0	285.1
2082	MALT BEVERAGES	8	8	4.1	48.1	2.7	4.5	31.7	128.3	144.1	273.7	4.0	5.8	160.1
2085	DISTILLED LIQUOR, EXCEPT BRANDY	1	6	.7	6.8	.5	.9	4.7	16.6	19.8	36.0	.5	CC	(D)
2086	BOTTLED AND CANNED SOFT DRINKS	71	34	2.7	27.0	1.2	2.4	9.5	94.4	122.3	216.8	6.0	3.2	47.6
2087	FLAVORING EXTRACTS AND SIRUPS, NEC	40	14	1.2	11.9	.7	1.4	5.8	59.0	59.6	119.1	1.8	.8	46.0
209	MISC. FOODS AND KINDRED PRODUCTS	120	51	7.7	75.8	5.7	11.3	50.7	365.8	483.8	846.0	12.4	(NA)	(NA)
2095	ROASTED COFFEE	17	10	3.6	42.4	2.7	5.5	30.6	268.9	369.7	636.3	7.9	3.8	204.5
2099	FOOD PREPARATIONS, NEC	62	26	2.2	20.0	1.5	2.9	11.1	63.9	75.6	138.6	2.0	2.5	55.3
22	TEXTILE MILL PRODUCTS	577	297	29.7	244.2	24.9	51.5	182.7	439.5	484.0	926.3	40.9	28.1	317.3
2221	WEAVING MILLS, SYNTHETICS	32	20	1.8	12.9	1.6	3.2	9.8	23.1	27.2	49.9	3.6	1.3	11.6
2241	NARROW FABRIC MILLS	27	9	1.0	6.7	.8	1.6	4.8	14.2	9.2	22.9	.2	1.1	8.9
225	KNITTING MILLS	234	121	12.6	97.8	10.9	22.1	76.2	177.4	216.8	399.7	24.0	9.0	99.5
2253	KNIT OUTERWEAR MILLS	91	50	3.7	22.4	3.3	6.1	17.3	43.0	26.6	69.2	1.8	5.3	48.4
226	TEXTILE FINISHING, EXCEPT WOOL	109	78	7.6	72.1	6.5	14.3	57.2	122.5	86.4	208.6	6.1	8.3	93.3
2261	FINISHING PLANTS, COTTON	25	14	1.3	10.7	1.1	2.4	8.8	15.0	8.2	23.1	1.7	1.2	13.2
2262	FINISHING PLANTS, SYNTHETICS	57	48	4.8	50.6	4.1	9.4	40.5	87.5	44.1	131.6	3.0	6.0	69.0
2269	FINISHING PLANTS, NEC	27	16	1.5	10.9	1.2	2.5	7.9	20.0	34.0	53.9	1.4	1.2	11.0
228	YARN AND THREAD MILLS	26	10	.8	6.0	.7	1.4	4.1	11.8	27.2	39.0	.5	.8	7.6
2282	THROWING AND WINDING MILLS	18	8	.7	4.6	.6	1.1	3.1	9.8	25.7	35.6	.4	.7	7.2
229	MISCELLANEOUS TEXTILE GOODS	119	46	4.7	40.2	3.4	7.0	24.5	77.3	86.7	162.2	5.7	5.3	67.8
2295	COATED FABRICS, NOT RUBBERIZED	38	23	2.1	18.0	1.4	3.0	10.7	38.4	41.8	79.6	1.8	EE	(D)
2298	CORDAGE AND TWINE	8	2	.5	4.2	.4	.8	2.9	7.3	6.4	14.1	(D)	CC	(D)
23	APPAREL, OTHER TEXTILE PRODUCTS	1 919	896	69.4	388.0	61.3	107.0	299.2	711.7	615.4	1 326.8	12.9	73.2	587.7
2311	MEN'S AND BOYS' SUITS AND COATS	59	48	7.3	41.3	6.6	11.4	35.1	68.6	37.9	105.5	.8	7.5	60.8
232	MEN'S AND BOYS' FURNISHINGS	93	57	5.5	33.5	4.8	8.3	24.1	89.9	83.1	175.8	1.0	5.6	66.7
2327	MEN'S AND BOYS' SEPARATE TROUSERS	12	5	.4	2.5	.4	.7	2.2	3.1	.7	3.9	.1	.7	3.4
2328	MEN'S AND BOYS' WORK CLOTHING	7	3	.4	2.2	.4	.7	1.9	3.1	2.3	5.4	.1	(NA)	(NA)
2329	MEN'S AND BOYS' CLOTHING, NEC	36	24	2.2	13.2	1.9	3.4	10.3	45.2	49.9	96.2	.3	2.7	50.5
233	WOMEN'S AND MISSES' OUTERWEAR	662	469	29.6	158.3	26.7	45.1	126.2	248.2	210.0	456.2	3.6	29.7	216.9
2331	WOMEN'S, MISSES' BLOUSES, WAISTS	61	44	3.0	17.8	2.7	4.9	13.5	31.7	30.0	61.7	.5	1.8	12.9
2335	WOMEN'S AND MISSES' DRESSES	300	188	11.0	54.4	9.8	15.9	43.0	92.7	93.3	185.1	1.4	11.8	83.4
2337	WOMEN'S AND MISSES' SUITS AND COATS	231	188	12.1	64.1	11.2	19.0	55.1	86.7	33.3	119.8	.9	13.7	101.7
2339	WOMEN'S, MISSES' OUTERWEAR, NEC	70	49	3.5	21.9	3.0	5.4	14.7	37.1	53.4	89.6	.8	2.4	18.9
234	WOMEN'S, CHILDREN'S UNDERGARMENTS	66	38	5.0	27.9	4.0	7.0	17.9	66.5	58.3	125.7	.8	6.3	51.2
2341	WOMEN'S AND CHILDREN'S UNDERWEAR	39	20	2.1	10.1	1.8	3.3	7.2	22.0	11.8	35.0	.3	3.3	29.7
2342	BRASSIERES AND ALLIED GARMENTS	27	18	2.9	17.7	2.2	3.7	10.7	44.4	46.5	90.8	.6	3.1	21.5
235	HATS, CAPS, AND MILLINERY	25	7	.5	2.7	.5	.8	2.0	4.8	3.6	8.5	.1	.7	4.5
2352	HATS AND CAPS, EXCEPT MILLINERY	19	5	.3	1.5	.3	.5	1.1	2.2	1.4	3.6	(D)	.5	2.6
236	CHILDREN'S OUTERWEAR	131	96	6.0	31.1	5.5	9.4	24.5	53.4	45.4	99.1	.7	6.9	45.0
2361	CHILDREN'S DRESSES AND BLOUSES	61	49	2.8	14.7	2.4	4.2	10.9	26.9	24.3	51.8	.3	3.5	24.4
2363	CHILDREN'S COATS AND SUITS	39	27	1.8	9.0	1.7	2.7	7.5	13.3	13.5	26.7	.1	2.4	12.8
2369	CHILDREN'S OUTERWEAR, NEC	31	20	1.4	7.4	1.3	2.5	6.1	13.2	7.6	20.6	.4	1.0	7.8
238	MISC. APPAREL AND ACCESSORIES	78	53	4.1	21.8	3.6	6.4	17.0	40.0	46.0	85.4	.5	4.2	28.8
2384	ROBES AND DRESSING GOWNS	9	8	.6	3.0	.5	1.0	2.6	5.7	2.4	8.1	.1	.7	3.8
2385	WATERPROOF OUTERGARMENTS	26	20	1.3	6.7	1.1	1.9	5.5	12.3	11.7	24.0	.1	1.3	7.4
2386	LEATHER AND SHEEP LINED CLOTHING	10	9	.8	5.2	.8	1.4	3.9	8.1	8.3	16.7	.1	EE	(D)
2387	APPAREL BELTS	7	4	.4	2.1	.4	.7	1.7	3.7	3.7	7.4	(D)	(NA)	(NA)
239	MISC. FABRICATED TEXTILE PRODUCTS	801	126	11.3	70.9	9.7	18.5	52.1	138.0	132.3	269.5	5.0	12.2	113.2
2391	CURTAINS AND DRAPERIES	46	10	1.0	5.0	.9	1.6	4.2	6.8	6.8	13.6	.5	.8	4.7
2392	HOUSEFURNISHINGS, NEC	63	27	2.5	14.2	2.1	3.8	9.8	33.4	37.9	70.8	1.1	2.9	25.5
2393	TEXTILE BAGS	9	5	.5	2.8	.4	.7	1.8	3.1	11.5	14.5	.6	AA	(D)
2395	PLEATING AND STITCHING	167	17	1.6	8.4	1.4	2.5	6.7	16.0	8.9	24.9	.5	1.3	9.1

See footnotes at end of table.

TABLE 3. General Statistics for the State, by Industry Groups and Industries: 1972 and 1967—Continued

(See appendix, Explanation of Terms)

Code	Industry	1972										1967		
		Establishments		All employees		Production workers			Value added by manufacture	Cost of materials <sup>1</sup>	Value of shipments <sup>1</sup>	Capital expenditures, 1967	All employees	Value added by manufacture
		Total	With 20 employees or more	Number	Payroll	Number	Man-hours	Wages						
		(number)	(number)	(1,000)	(million dollars)	(1,000)	(million)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(1,000)	(million dollars)	
2396	AUTOMOTIVE AND APPAREL TRIMMINGS . . .	58	14	.8	6.5	.7	1.3	4.6	11.3	11.7	22.9	.4	1.0	7.9
2397	SCHIFFLI MACHINE EMBROIDERIES. . . . .	371	28	2.9	23.2	2.5	5.7	17.5	48.0	33.7	81.5	.9	FF	(D)
2399	FABRICATED TEXTILE PRODUCTS, NEC . . .	54	24	1.8	9.7	1.5	2.6	6.8	17.3	19.5	36.9	1.1	2.3	18.7
24	LUMBER AND WOOD PRODUCTS . . . . .	353	77	5.7	44.1	4.6	8.7	29.9	76.0	86.3	163.4	3.6	(NA)	(NA)
242	SAWMILLS AND PLANING MILLS . . . . .	37	7	.3	2.2	.3	.6	1.8	3.9	4.6	8.5	.1	.4	4.2
243	MILLWORK, PLYWOOD, STRUC. MEMBERS. .	169	39	3.1	25.9	2.5	4.9	17.4	44.8	54.1	98.1	1.9	(NA)	(NA)
2431	MILLWORK . . . . .	84	23	1.7	15.6	1.3	2.5	10.0	25.5	35.7	60.8	.9	(NA)	(NA)
2434	WOOD KITCHEN CABINETS. . . . .	72	11	1.2	8.8	1.1	2.3	6.5	15.5	11.9	27.3	.4	(NA)	(NA)
244	WOOD CONTAINERS. . . . .	45	12	.7	4.6	.6	1.1	3.3	8.9	9.5	18.3	.5	(NA)	(NA)
2448	WOOD PALLETS AND SKIDS . . . . .	14	6	.4	2.3	.3	.5	1.7	4.6	5.4	10.0	.4	(NA)	(NA)
249	MISCELLANEOUS WOOD PRODUCTS. . . . .	84	16	1.2	9.1	1.0	2.0	5.8	16.0	14.9	32.6	.8	(NA)	(NA)
25	FURNITURE AND FIXTURES . . . . .	301	104	10.8	78.9	8.8	16.9	56.5	162.1	129.9	291.3	8.0	9.8	105.6
251	HOUSEHOLD FURNITURE. . . . .	138	51	5.1	34.9	4.1	7.9	24.5	73.4	71.0	144.8	2.4	(NA)	(NA)
2511	WOOD HOUSEHOLD FURNITURE . . . . .	69	18	1.4	8.7	1.2	2.3	6.2	18.4	19.6	38.0	.6	(NA)	(NA)
2514	METAL HOUSEHOLD FURNITURE. . . . .	15	7	.9	4.1	.8	1.5	3.1	9.7	9.5	19.3	.3	EE	(D)
2515	MATTRESSES AND BEDSPRINGS. . . . .	30	15	2.2	18.2	1.7	3.2	12.4	39.7	35.7	75.5	1.3	2.0	25.8
252	OFFICE FURNITURE . . . . .	11	5	1.5	11.2	1.2	2.8	8.5	22.5	14.3	36.3	(D)	2.0	21.8
254	PARTITIONS AND FIXTURES. . . . .	94	34	2.9	22.4	2.4	4.2	16.1	48.3	28.0	75.8	1.4	1.1	13.0
2591	DRAPERY HARDWARE, BLINDS, SHADES . . .	28	2	.5	3.5	.4	.7	2.3	6.8	7.2	13.9	.1	.5	7.6
26	PAPER AND ALLIED PRODUCTS. . . . .	391	248	32.0	299.1	24.1	49.5	195.5	536.7	617.9	1 154.5	36.2	32.2	452.5
2621	PAPERMILLS, EXCEPT BUILDING PAPER. . .	16	12	2.6	31.2	2.0	4.5	21.1	56.9	64.1	121.1	4.7	3.0	49.6
264	MISC. CONVERTED PAPER PRODUCTS . . .	173	88	11.9	109.0	8.4	16.6	63.7	188.5	233.4	423.2	15.8	10.5	149.3
2643	BAGS, EXCEPT TEXTILE BAGS. . . . .	39	23	2.2	17.1	1.7	3.4	12.6	34.9	48.8	83.9	2.1	1.7	18.8
2648	STATIONERY PRODUCTS. . . . .	31	11	.9	6.6	.8	1.3	4.5	14.8	13.8	28.2	.8	(NA)	(NA)
265	PAPERBOARD CONTAINERS AND BOXES. . . .	177	127	14.9	129.4	11.6	23.3	87.0	245.7	251.0	495.0	10.7	15.0	184.2
2651	FOLDING PAPERBOARD BOXES . . . . .	35	24	3.1	27.7	2.4	4.9	19.0	49.8	39.0	88.8	2.3	3.7	39.7
2652	SETUP PAPERBOARD BOXES . . . . .	26	18	1.1	7.6	1.0	1.9	5.4	14.9	7.3	22.0	.3	1.1	8.2
2653	CORRUGATED AND SOLID FIBER BOXES . . .	74	57	7.2	67.4	5.3	10.7	42.9	118.9	144.1	262.6	4.7	7.2	92.0
2654	SANITARY FOOD CONTAINERS . . . . .	13	8	2.0	14.2	1.6	2.9	10.3	36.3	36.7	72.1	2.1	1.8	30.5
2655	FIBER CANS, DRUMS, SIMILAR PRODUCTS. .	29	20	1.6	12.5	1.3	2.8	9.5	25.7	24.0	49.5	1.3	1.2	13.9
27	PRINTING AND PUBLISHING. . . . .	1 622	365	40.5	374.1	23.9	43.7	205.4	728.9	341.3	1 068.5	32.1	40.8	520.4
2711	NEWSPAPERS . . . . .	207	61	10.7	95.7	4.1	7.2	39.0	212.0	59.5	271.4	8.9	10.9	140.1
273	BOOKS. . . . .	93	29	3.2	27.8	1.2	2.3	9.1	74.2	41.8	115.7	.8	2.9	59.7
2731	BOOK PUBLISHING. . . . .	53	18	2.4	19.9	.5	.9	3.2	62.6	35.8	98.2	.5	1.8	49.2
2732	BOOK PRINTING. . . . .	40	11	.9	7.9	.7	1.4	5.9	11.6	6.0	17.5	.3	1.1	10.5
2741	MISCELLANEOUS PUBLISHING . . . . .	75	18	3.8	36.3	.9	1.5	8.5	66.3	19.7	85.8	1.5	2.9	17.2
275	COMMERCIAL PRINTING. . . . .	897	156	13.2	134.6	10.4	19.5	96.0	227.8	147.1	374.9	12.1	(NA)	(NA)
2752	COMMERCIAL PRINTING, LITHOGRAPHIC. . .	310	76	5.7	60.6	4.3	8.3	41.2	105.7	69.5	175.0	5.7	(NA)	(NA)
2753	ENGRAVING AND PLATE PRINTING . . . . .	42	12	.6	5.7	.5	1.0	4.2	9.2	2.9	12.1	(D)	(NA)	(NA)
278	BLANKBOOKS AND BOOKBINDING . . . . .	87	39	5.2	38.2	4.5	8.2	30.0	63.3	28.4	91.3	2.6	5.0	50.2
2782	BLANKBOOKS AND LOOSELEAF BINDERS . . .	24	14	2.6	18.5	2.2	4.4	14.5	33.3	22.4	55.2	1.8	2.4	27.4
2789	BOOKBINDING AND RELATED WORK . . . . .	63	25	2.6	19.7	2.3	3.8	15.4	30.0	6.0	36.1	.8	2.5	22.7
279	PRINTING TRADE SERVICES. . . . .	140	26	2.1	21.8	1.4	2.7	13.5	38.7	13.1	51.8	3.4	(NA)	(NA)
2791	TYPESETTING. . . . .	92	15	.9	8.3	.7	1.4	6.1	15.2	2.5	17.9	.8	.6	6.4
2793	PHOTOENGRAVING . . . . .	39	8	.6	6.9	.4	.7	4.3	10.7	2.4	13.1	.6	BB	(D)
28	CHEMICALS AND ALLIED PRODUCTS. . . . .	940	470	100.5	1 066.2	59.5	116.0	541.1	3 939.0	2 647.3	6 544.0	232.5	96.8	2 822.1
281	INDUSTRIAL INORGANIC CHEMICALS . . . .	71	47	6.1	67.0	4.0	8.1	41.1	199.7	212.0	412.0	13.8	(NA)	(NA)
2813	INDUSTRIAL GASES . . . . .	23	9	.5	4.7	.3	.5	2.4	26.7	6.7	33.6	.6	.7	21.4
2816	INORGANIC PIGMENTS . . . . .	15	9	2.0	23.8	1.5	3.1	17.6	63.1	36.4	106.5	3.0	2.3	65.9
282	PLASTICS MATERIALS AND SYNTHETICS. . .	35	26	5.4	59.8	3.4	8.0	36.5	161.0	216.2	387.6	14.2	(NA)	(NA)
2821	PLASTICS MATERIALS AND RESINS. . . . .	29	24	5.3	59.3	3.3	7.9	36.2	160.1	214.2	384.6	13.6	(NA)	(NA)
283	DRUGS. . . . .	112	59	28.3	329.0	13.3	27.1	129.0	1 453.2	421.5	1 858.8	82.4	21.7	921.6
2831	BIOLOGICAL PRODUCTS. . . . .	13	4	.5	5.5	.3	.4	2.2	12.7	6.7	18.4	1.1	.2	2.0
2833	MEDICINALS AND BOTANICALS. . . . .	23	10	2.7	32.3	1.7	3.3	18.3	80.7	69.1	150.7	34.4	2.4	62.8
2834	PHARMACEUTICAL PREPARATIONS. . . . .	76	45	25.1	291.2	11.3	23.4	108.5	1 359.8	345.8	1 689.6	46.9	19.1	856.8
284	SOAPS, CLEANERS, AND TOILET GOODS. . .	233	100	24.8	200.0	16.2	27.5	108.3	1 005.5	547.0	1 520.6	29.8	(NA)	(NA)
2841	SOAP AND OTHER DETERGENTS. . . . .	52	19	3.5	37.0	2.6	5.1	26.6	264.0	164.6	417.5	9.4	4.6	181.9
2843	SURFACE ACTIVE AGENTS. . . . .	35	18	1.4	15.2	.7	1.4	6.4	40.7	50.4	90.8	2.6	1.8	32.7
2851	PAINTS AND ALLIED PRODUCTS . . . . .	149	69	6.9	64.8	4.0	7.9	33.1	192.4	215.2	405.8	14.8	7.6	168.5
286	INDUSTRIAL ORGANIC CHEMICALS . . . . .	116	78	21.2	262.4	13.2	26.8	148.6	676.9	794.0	1 470.7	66.3	(NA)	(NA)
2865	CYCLIC CRUDES AND INTERMEDIATES. . . .	39	31	8.3	94.9	5.5	11.4	58.5	235.4	248.9	486.3	21.1	10.0	232.0
2869	INDUSTRIAL ORGANIC CHEMICALS, NEC. . .	74	46	12.9	167.1	7.6	15.4	89.9	439.3	541.5	978.7	45.0	(NA)	(NA)

See footnotes at end of table.



TABLE 3. General Statistics for the State, by Industry Groups and Industries: 1972 and 1967—Continued

(See appendix, Explanation of Terms)

Code	Industry	1972											1967	
		Establishments		All employees		Production workers			Value added by manufacture	Cost of materials <sup>1</sup>	Value of shipments <sup>1</sup>	Capital expenditures, new	All employees	Value added by manufacture
		Total	With 20 employees or more	Number	Payroll	Number	Man-hours	Wages						
		(number)	(number)	(1,000)	(million dollars)	(1,000)	(million)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(1,000)	(million dollars)
287	AGRICULTURAL CHEMICALS . . . . .	26	14	1.5	14.6	.9	2.0	8.3	69.4	70.4	140.8	3.0	(NA)	(NA)
289	MISCELLANEOUS CHEMICAL PRODUCTS . .	198	77	7.0	68.6	4.5	8.8	36.6	180.9	171.0	347.7	8.7	(NA)	(NA)
2899	CHEMICAL PREPARATIONS, NEC . . . . .	111	35	3.5	31.1	2.	4.0	16.5	88.4	79.3	164.0	3.7	(NA)	(NA)
299	MISC. PETROLEUM AND COAL PRODUCTS .	22	10	.6	7.1	.4	.7	3.6	31.1	48.5	80.5	1.5	(NA)	(NA)
2992	LUBRICATING OILS AND GREASES . . . .	22	10	.6	7.1	.4	.7	3.6	31.1	48.5	80.5	1.5	(NA)	(NA)
30	RUBBER AND MISC. PLASTICS PROD . . .	652	336	37.4	307.7	29.1	58.7	207.2	624.1	507.6	1 120.7	73.9	(NA)	(NA)
3079	MISCELLANEOUS PLASTICS PRODUCTS . .	555	278	27.7	222.0	21.9	44.2	150.7	477.1	398.8	869.8	62.7	(NA)	(NA)
31	LEATHER AND LEATHER PRODUCTS . . .	141	72	9.2	59.0	7.8	14.1	40.8	109.7	112.7	219.9	(D)	11.9	97.8
3111	LEATHER TANNING AND FINISHING . . . .	43	15	2.0	13.4	1.7	2.5	9.0	31.0	45.6	74.6	1.0	2.3	27.7
314	FOOTWEAR, EXCEPT RUBBER . . . . .	15	12	1.2	9.7	1.1	2.0	6.5	13.8	10.1	23.8	.2	2.3	16.1
3144	WOMEN'S FOOTWEAR, EXCEPT ATHLETIC .	7	5	.3	1.9	.3	.5	1.4	2.4	1.8	4.1	(Z)	(NA)	(NA)
3161	LUGGAGE . . . . .	20	11	1.4	8.5	1.1	2.1	5.9	11.5	11.3	23.2	.1	1.7	13.1
32	STONE, CLAY, AND GLASS PRODUCTS . .	563	233	37.2	332.1	29.4	59.3	241.0	703.3	466.9	1 166.3	60.3	37.1	484.3
322	GLASS, GLASSWARE, PRESSED OR BLOWN	27	15	15.1	129.7	13.3	26.5	107.2	264.1	139.6	401.5	23.8	13.6	173.6
3231	PRODUCTS OF PURCHASED GLASS, NEC . .	87	31	3.0	25.4	2.1	4.2	16.1	50.0	40.6	91.5	2.1	3.1	32.2
326	POTTERY AND RELATED PRODUCTS . . . .	50	30	4.1	31.2	3.3	6.2	21.9	60.0	17.8	77.4	2.3	4.0	44.6
3261	VITREOUS PLUMBING FIXTURES . . . . .	6	4	.8	6.8	.7	1.2	5.6	14.2	6.6	20.5	.2	1.1	15.5
3264	PORCELAIN ELECTRICAL SUPPLIES . . . .	18	14	1.3	8.9	1.0	2.1	6.5	15.9	5.4	21.2	.6	EE	(D)
327	CONCRETE, GYPSUM, PLASTER PRODUCTS	235	92	6.2	62.0	3.9	8.4	36.5	138.7	134.7	273.9	10.5	5.5	87.5
3271	CONCRETE BLOCK AND BRICK . . . . .	48	16	.9	7.7	.5	1.1	4.1	19.3	21.6	40.8	1.7	.7	10.9
3272	CONCRETE PRODUCTS, NEC . . . . .	104	38	3.3	30.5	2.0	4.2	16.6	65.8	41.0	107.4	4.0	2.7	38.6
3273	READY-MIXED CONCRETE . . . . .	76	34	1.6	18.7	1.0	2.1	11.8	41.6	53.5	95.1	3.8	1.7	29.3
329	MISC. NONMETALLIC MINERAL PRODUCTS	120	53	7.9	76.4	5.9	12.1	53.4	175.0	124.4	297.4	20.0	(NA)	(NA)
3291	ABRASIVE PRODUCTS . . . . .	24	7	.5	4.5	.3	.7	2.5	7.7	6.5	14.2	.3	.8	9.9
3292	ASBESTOS PRODUCTS . . . . .	12	8	1.7	16.7	1.4	2.8	12.8	33.6	29.1	61.5	1.7	(NA)	(NA)
3295	MINERALS, GROUND OR TREATED . . . .	25	7	.6	6.1	.5	.9	3.9	13.3	15.3	29.7	(D)	.6	9.4
3296	MINERAL WOOL . . . . .	8	6	1.9	19.2	1.5	3.1	14.5	54.9	37.1	92.3	(D)	2.0	30.8
3299	NONMETALLIC MINERAL PRODUCTS, NEC .	25	9	.5	4.3	.4	.9	3.2	12.6	4.2	16.6	.5	.3	2.9
33	PRIMARY METAL INDUSTRIES . . . . .	324	174	30.6	298.6	23.4	47.8	208.7	570.2	1 353.3	1 922.0	29.9	37.6	578.0
331	BLAST FURNACE, BASIC STEEL PROD . . .	46	26	4.6	50.9	3.4	6.9	34.3	91.1	126.3	219.5	5.5	5.6	83.6
3315	STEEL WIRE AND RELATED PRODUCTS . . .	17	10	1.1	11.1	.8	1.6	7.0	20.7	29.5	55.8	1.6	1.6	18.5
332	IRON AND STEEL FOUNDRIES . . . . .	39	25	4.6	41.2	3.7	7.9	31.2	76.6	65.5	143.0	4.5	5.5	66.3
3321	GRAY IRON FOUNDRIES . . . . .	28	17	3.5	30.8	2.8	5.9	23.7	53.3	53.5	108.1	3.9	4.2	54.8
333	PRIMARY NONFERROUS METALS . . . . .	15	9	4.1	40.5	3.3	6.6	31.3	69.4	258.9	324.9	4.8	3.1	37.1
3341	SECONDARY NONFERROUS METALS . . . . .	29	13	1.4	13.7	1.0	2.0	8.8	27.0	162.8	190.2	.8	1.6	34.3
335	NONFERROUS ROLLING AND DRAWING . . .	68	50	11.6	113.0	8.7	17.6	78.1	236.2	662.8	896.9	10.8	14.7	261.0
3351	COPPER ROLLING AND DRAWING . . . . .	13	10	2.8	26.9	2.2	4.8	20.4	53.8	275.8	329.4	3.3	3.0	54.6
3354	ALUMINUM EXTRUDED PRODUCTS . . . . .	8	7	1.4	8.1	1.1	1.7	5.3	14.3	24.6	38.6	.5	(NA)	(NA)
3356	NONFERROUS ROLLING, DRAWING, NEC . .	15	9	1.6	15.5	1.1	2.2	9.2	34.8	81.1	107.8	.9	1.9	8.3
3357	NONFERROUS WIRE DRAWING, INSULATING.	31	23	5.7	61.4	4.1	8.7	42.2	129.3	277.0	414.4	5.6	9.0	193.2
336	NONFERROUS FOUNDRIES . . . . .	70	30	2.4	20.6	1.9	3.9	14.7	31.7	33.5	66.0	1.4	4.5	52.4
3361	ALUMINUM FOUNDRIES . . . . .	31	13	1.0	9.1	.9	1.8	6.6	12.5	12.1	24.4	.4	1.5	18.8
3362	BRASS, BRONZE, AND COPPER FOUNDRIES.	20	7	.5	4.7	.4	.8	3.1	8.2	5.9	14.6	.5	.8	8.8
3369	NONFERROUS FOUNDRIES, NEC . . . . .	19	10	.8	6.8	.6	1.3	4.9	11.0	15.5	27.0	.5	2.2	24.8
339	MISC. PRIMARY METAL PRODUCTS . . . .	57	21	1.9	18.7	1.4	2.9	10.5	38.2	43.5	81.5	2.0	(NA)	(NA)
3398	METAL HEAT TREATING . . . . .	43	13	.9	8.3	.7	1.5	5.1	14.4	4.6	19.0	1.1	(NA)	(NA)
3399	PRIMARY METAL PRODUCTS, NEC . . . .	14	8	1.0	10.3	.6	1.4	5.4	23.8	38.9	62.5	.9	(NA)	(NA)
34	FABRICATED METAL PRODUCTS . . . . .	1 520	534	60.2	570.0	45.8	92.4	387.7	1 147.9	961.0	2 091.5	46.4	(NA)	(NA)
341	METAL CANS AND SHIPPING CONTAINERS	41	35	8.7	93.6	7.4	15.7	75.2	208.2	258.7	466.3	8.2	(NA)	(NA)
3411	METAL CANS . . . . .	28	23	7.2	78.5	6.2	13.1	64.6	179.2	222.3	401.0	6.2	7.5	134.3
3412	METAL BARRELS, DRUMS, AND PAILS . . .	13	12	1.5	15.1	1.2	2.6	10.7	28.9	36.4	65.3	2.0	1.6	21.9
342	CUTLERY, HANDTOOLS AND HARDWARE . .	86	37	8.5	80.6	6.9	13.9	59.5	178.1	90.9	265.6	7.4	9.0	134.8
3421	CUTLERY . . . . .	15	9	2.1	17.1	1.7	3.5	12.2	34.4	20.7	53.6	.6	1.8	18.2
3423	HAND AND EDGE TOOLS, NEC . . . . .	27	12	1.6	11.9	1.2	2.4	8.1	29.8	18.4	46.5	3.1	1.7	17.5
3429	HARDWARE, NEC . . . . .	41	16	4.8	51.4	4.0	7.9	39.0	113.6	51.6	164.9	3.7	5.5	98.8
344	FABRICATED STRUCTURAL METAL PROD .	521	164	12.8	125.2	9.3	18.3	80.9	231.5	226.7	455.8	7.7	13.0	177.8
3441	FABRICATED STRUCTURAL METAL PRODUCTS	100	40	3.0	31.3	2.1	4.1	20.2	55.2	59.1	115.0	1.9	3.3	54.2
3443	FABRICATED PLATEWORK (BOILERS SHOP).	84	33	2.5	25.9	1.8	3.5	16.7	49.7	41.7	90.3	1.7	2.2	32.2
3444	SHEET METALWORK . . . . .	178	50	3.8	39.9	3.0	6.0	28.1	67.3	60.0	125.0	2.3	4.1	51.1
3446	ARCHITECTURAL METALWORK . . . . .	76	5	.7	5.5	.5	1.1	3.5	10.7	8.1	18.6	.3	.6	8.9
345	SCREW MACHINE PRODUCTS, BOLTS, ETC	132	45	4.6	45.4	3.4	6.8	30.9	86.5	46.4	130.9	3.4	5.6	85.6
3451	SCREW MACHINE PRODUCTS . . . . .	102	29	1.8	15.0	1.4	2.9	10.8	26.3	13.1	38.9	1.4	2.1	29.9
3452	BOLTS, NUTS, RIVETS, AND WASHERS . .	30	16	2.8	30.4	2.0	4.0	20.1	60.2	33.3	92.0	2.0	3.5	55.7

See footnotes at end of table.

TABLE 3. General Statistics for the State, by Industry Groups and Industries: 1972 and 1967—Continued

(See appendix, Explanation of Terms)

Code	Industry	1972										1967		
		Establishments		All employees		Production workers			Value added by manufacture	Cost of materials <sup>1</sup>	Value of shipments <sup>1</sup>	Capital expenditures, new	All employees	Value added by manufacture
		Total	With 20 employees or more	Number	Payroll	Number	Man-hours	Wages						
		(number)	(number)	(1,000)	(million dollars)	(1,000)	(million)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(1,000)	(million dollars)
346	METAL FORGINGS AND STAMPINGS . . . . .	163	73	6.7	59.9	5.3	10.7	42.0	107.3	99.4	204.6	4.5	(NA)	(NA)
3462	IRON AND STEEL FORGINGS. . . . .	7	2	.3	2.8	.2	.4	1.7	5.0	4.7	9.2	(2)	.7	10.2
3466	CROWNS AND CLOSURES. . . . .	5	5	.9	9.3	.8	1.5	6.9	19.0	19.9	38.3	.7	(NA)	(NA)
3469	METAL STAMPINGS, NEC . . . . .	146	64	5.3	46.0	4.2	8.5	32.2	77.9	71.4	148.5	3.5	(NA)	(NA)
347	METAL SERVICES, NEC. . . . .	244	47	3.5	26.6	2.8	5.6	18.7	50.2	29.5	79.6	3.0	3.3	36.2
3471	PLATING AND POLISHING. . . . .	155	26	2.1	15.7	1.7	3.5	11.1	30.3	13.8	44.1	2.2	2.0	21.3
3479	METAL COATING AND ALLIED SERVICES. . . . .	89	21	1.4	10.8	1.1	2.1	7.6	19.9	15.7	35.5	.9	1.3	14.9
349	MISC. FABRICATED METAL PRODUCTS. . . . .	288	111	11.9	110.5	8.1	16.4	62.6	231.6	154.1	380.9	9.7	(NA)	(NA)
3494	VALVES AND PIPE FITTINGS . . . . .	46	28	4.2	44.3	2.6	5.3	23.5	103.1	46.2	147.2	2.2	4.8	80.1
3495	WIRE SPRINGS . . . . .	8	4	.3	2.3	.3	.5	1.9	4.3	3.6	7.8	.1	(NA)	(NA)
3496	MISC. FABRICATED WIRE PRODUCTS . . . . .	69	20	1.7	14.4	1.3	2.7	9.3	24.2	22.3	46.1	1.2	(NA)	(NA)
3497	METAL FOIL AND LEAF. . . . .	9	7	.9	10.0	.6	1.2	4.8	23.9	21.6	45.8	2.4	.8	10.4
3499	FABRICATED METAL PRODUCTS, NEC . . . . .	133	40	3.1	24.4	2.4	4.8	15.6	48.0	35.5	83.2	2.3	(NA)	(NA)
35	MACHINERY, EXCEPT ELECTRICAL. . . . .	1 996	450	61.1	617.7	40.2	81.1	364.3	1 253.2	837.1	2 056.9	63.3	70.3	1 041.2
353	CONSTRUCTION AND RELATED MACHINERY	65	25	5.3	53.6	3.3	4.4	29.8	144.1	77.6	217.9	5.0	FF	(D)
3535	CONVEYORS AND CONVEYING EQUIPMENT. . . . .	24	12	1.2	11.5	.7	1.3	5.1	28.6	22.5	50.0	1.6	1.5	24.4
354	METALWORKING MACHINERY . . . . .	515	85	7.2	71.5	5.4	11.3	52.1	123.2	51.3	172.5	5.6	10.5	146.9
3541	MACHINE TOOLS, METAL CUTTING TYPES . . . . .	43	5	.4	3.8	.3	.5	2.4	7.3	4.4	11.4	.1	.7	11.3
3542	MACHINE TOOLS, METAL FORMING TYPES . . . . .	22	8	.4	3.5	.3	.5	2.1	5.8	4.1	10.1	.6	.4	4.9
3544	SPECIAL DIES, TOOLS, JIGS, FIXTURES . . . . .	380	54	4.5	46.4	3.5	7.5	35.8	75.6	26.3	100.7	4.1	5.9	79.0
3545	MACHINE TOOL ACCESSORIES . . . . .	51	8	.8	7.5	.6	1.2	4.8	13.6	5.2	18.7	.4	1.3	20.7
3549	METALWORKING MACHINERY, NEC. . . . .	18	9	1.1	9.5	.8	1.5	6.6	19.2	10.5	29.1	.4	(NA)	(NA)
355	SPECIAL INDUSTRY MACHINERY . . . . .	291	97	11.7	121.7	7.1	14.5	66.6	219.0	143.9	367.0	5.9	13.0	204.0
3552	TEXTILE MACHINERY. . . . .	59	12	.9	7.5	.7	1.3	4.8	16.1	9.1	25.4	.4	1.2	13.7
3554	PAPER INDUSTRIES MACHINERY . . . . .	17	9	1.4	15.7	.9	1.8	9.2	26.3	17.7	42.6	.9	2.2	30.3
3555	PRINTING TRADES MACHINERY. . . . .	55	21	3.0	31.2	1.6	3.1	15.5	66.8	37.0	106.7	1.9	2.8	57.3
3559	SPECIAL INDUSTRY MACHINERY, NEC. . . . .	127	44	5.5	57.5	3.3	7.1	31.3	94.0	71.7	166.8	2.4	6.2	89.8
356	GENERAL INDUSTRIAL MACHINERY . . . . .	221	91	13.5	149.0	9.1	18.3	90.2	299.2	233.0	536.6	14.8	16.6	236.0
3567	INDUSTRIAL FURNACES AND OVENS. . . . .	23	10	.9	10.6	.5	1.1	5.2	18.3	17.4	35.9	1.0	.9	15.4
3569	GENERAL INDUSTRIAL MACHINERY, NEC. . . . .	75	38	3.0	28.9	1.8	3.5	14.6	56.0	36.2	91.3	2.8	2.2	28.6
357	OFFICE AND COMPUTING MACHINES. . . . .	73	37	7.1	68.8	3.9	7.6	30.8	157.3	81.3	218.3	19.6	6.2	112.4
3573	ELECTRONIC COMPUTING EQUIPMENT . . . . .	40	22	4.7	46.5	2.2	4.1	17.0	110.3	58.4	151.2	18.6	2.5	52.9
3589	SERVICE INDUSTRY MACHINERY, NEC. . . . .	40	15	.7	7.2	.4	.8	3.3	13.2	18.0	30.0	.3	1.4	17.5
359	MISC. MACHINERY, EXCEPT ELECTRICAL	727	67	6.0	55.6	4.8	9.7	39.7	101.1	43.7	143.9	4.6	(NA)	(NA)
36	ELECTRIC, ELECTRONIC EQUIPMENT . . . . .	855	392	97.9	972.2	65.1	126.0	552.3	1 599.8	1 011.9	2 601.2	67.7	(NA)	(NA)
361	ELECTRIC DISTRIBUTING EQUIPMENT. . . . .	62	30	5.6	49.6	3.9	7.6	29.3	84.3	56.5	141.2	1.6	(NA)	(NA)
3612	TRANSFORMERS . . . . .	14	6	1.2	8.6	.9	1.8	5.9	11.7	12.6	23.7	.5	1.4	18.6
3613	SWITCHGEAR AND SWITCHBOARD APPARATUS	48	24	4.4	41.0	3.0	5.8	23.4	72.6	43.9	117.5	1.1	5.3	74.2
362	ELECTRICAL INDUSTRIAL APPARATUS. . . . .	74	26	4.3	35.7	3.0	6.1	22.2	60.7	46.5	101.2	2.5	5.2	54.0
3621	MOTORS AND GENERATORS. . . . .	19	12	2.9	24.7	2.1	4.2	15.5	42.1	32.5	70.3	2.1	3.3	34.8
3622	INDUSTRIAL CONTROLS. . . . .	34	5	.8	6.9	.6	1.1	4.2	12.3	7.7	18.1	.2	.9	7.2
3629	ELECTRICAL INDUSTRIAL APPARATUS, NEC	14	5	.3	2.5	.2	.4	1.6	3.4	2.8	6.1	.1	.9	9.6
363	HOUSEHOLD APPLIANCES . . . . .	35	13	4.2	40.1	3.3	6.6	28.1	72.1	32.5	102.0	9.2	FF	(D)
364	ELECT. LIGHTING AND WIRING EQUIP . . . . .	154	73	17.4	142.2	12.9	25.8	88.0	252.0	227.8	483.8	8.1	16.1	212.6
3643	CURRENT-CARRYING WIRING DEVICES. . . . .	36	12	3.6	24.2	2.7	5.5	15.5	37.4	37.1	73.2	1.6	3.0	36.5
3645	RESIDENTIAL LIGHTING FIXTURES. . . . .	61	29	2.8	20.1	2.1	4.2	11.8	37.7	38.6	75.8	1.1	(NA)	(NA)
3648	LIGHTING EQUIPMENT, NEC. . . . .	13	9	1.5	13.0	1.0	1.9	7.4	29.7	23.6	52.6	1.1	(NA)	(NA)
365	RADIO AND TV RECEIVING EQUIPMENT . . . . .	58	27	3.7	26.5	2.9	5.7	18.8	50.6	36.5	84.7	1.4	FF	(D)
3651	RADIO AND TV RECEIVING SETS. . . . .	26	11	.7	4.2	.6	1.0	2.8	9.1	8.0	16.1	.2	FF	(D)
3652	PHONOGRAPH RECORDS . . . . .	32	16	3.0	22.3	2.3	4.7	16.0	41.5	28.5	68.6	1.2	3.6	52.0
366	COMMUNICATION EQUIPMENT. . . . .	136	76	41.3	503.4	24.2	45.9	269.0	771.3	456.0	1 226.5	30.1	54.2	770.1
367	ELECTRONIC COMPONENTS AND ACCESS. . . . .	241	121	17.9	146.0	12.2	22.7	76.4	245.5	105.3	349.9	10.5	26.2	293.2
369	MISC. ELECTRICAL EQUIP., SUPPLIES. . . . .	95	26	3.5	28.7	2.7	5.6	20.5	63.3	50.8	111.9	4.3	5.0	68.8
3691	STORAGE BATTERIES. . . . .	8	5	1.2	11.9	1.0	1.9	9.7	28.2	26.0	53.7	(D)	EE	(D)
3694	ENGINE ELECTRICAL EQUIPMENT. . . . .	10	4	.7	4.3	.5	1.3	3.3	11.0	7.8	18.5	1.1	2.0	22.8
3699	ELECTRICAL EQUIPMENT, SUPPLIES, NEC.	68	12	1.1	7.1	.8	1.5	4.4	12.3	10.0	21.7	2.0	.7	8.4
37	TRANSPORTATION EQUIPMENT . . . . .	234	87	25.9	289.1	20.3	40.8	208.1	917.1	1 686.8	2 593.1	(D)	(NA)	(NA)
3713	TRUCK AND BUS BODIES . . . . .	24	10	.7	6.8	.6	1.3	5.1	8.8	14.5	22.3	.2	.5	4.9
3714	MOTOR VEHICLE PARTS AND ACCESSORIES. . . . .	83	24	3.0	25.4	2.0	4.2	13.6	42.1	54.4	91.4	(D)	3.0	44.0
372	AIRCRAFT AND PARTS . . . . .	34	16	5.6	65.7	3.5	7.1	35.0	110.0	54.5	165.6	(D)	(NA)	(NA)
38	INSTRUMENTS AND RELATED PRODUCTS	376	140	22.8	228.5	14.2	27.1	111.0	510.9	292.8	803.5	35.3	(NA)	(NA)
382	MEASURING AND CONTROLLING DEVICES. . . . .	110	45	4.7	45.2	2.8	5.0	20.0	73.7	41.2	115.9	7.7	(NA)	(NA)

See footnotes at end of table.



TABLE 3. General Statistics for the State, by Industry Groups and Industries: 1972 and 1967—Continued

(See appendix, Explanation of Terms)

Code	Industry	1972										1967		
		Establishments		All employees		Production workers			Value added by manufacture	Cost of materials <sup>1</sup>	Value of shipments <sup>1</sup>	Capital expenditures, new	All employees	Value added by manufacture
		Total	With 20 employees or more	Number	Payroll	Number	Man-hours	Wages						
		(number)	(number)	(1,000)	(million dollars)	(1,000)	(million)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(1,000)	(million dollars)
3823	PROCESS CONTROL INSTRUMENTS. . . . .	14	7	.6	5.7	.4	.7	2.5	6.6	3.5	10.3	5.0	(NA)	(NA)
3824	FLUID METERS AND COUNTING DEVICES. .	8	5	.4	3.5	.3	.5	1.9	6.5	3.7	10.2	.1	(NA)	(NA)
3825	INSTRUMENTS TO MEASURE ELECTRICITY .	48	18	2.3	23.3	1.3	2.5	9.8	34.5	20.4	56.5	1.6	(NA)	(NA)
384	MEDICAL INSTRUMENTS AND SUPPLIES . .	95	35	9.4	98.9	5.6	11.0	47.6	243.0	137.6	379.9	19.4	7.0	129.2
3841	SURGICAL AND MEDICAL INSTRUMENTS . .	38	14	4.1	39.5	2.5	4.6	18.1	70.3	49.2	118.9	(D)	3.0	28.2
3842	SURGICAL APPLIANCES AND SUPPLIES . .	33	14	4.5	51.6	2.5	5.2	24.4	147.3	74.5	221.8	12.7	FF	(D)
3873	WATCHES, CLOCKS, AND WATCHCASES. . .	11	8	1.0	7.8	.8	1.5	5.1	10.8	9.9	21.7	.5	(NA)	(NA)
39	MISC. MANUFACTURING INDUSTRIES . . .	704	234	27.8	198.9	21.2	40.3	127.3	427.6	317.7	749.7	25.8	26.0	264.7
3911	JEWELRY, PRECIOUS METAL. . . . .	62	19	2.1	19.8	1.5	3.2	11.7	35.7	33.4	67.4	.6	2.5	25.8
3915	JEWELERS' MATERIALS, LAPIDARY WORK .	23	6	.5	3.6	.4	.7	2.1	7.3	12.9	19.6	(D)	(NA)	(NA)
394	TOYS AND SPORTING GOODS. . . . .	111	45	8.1	46.4	6.1	12.3	30.6	113.1	84.2	200.6	12.5	8.8	81.5
3944	GAMES, TOYS, AND CHILDREN'S VEHICLES	44	21	6.1	34.3	4.7	9.8	22.9	76.7	50.9	133.4	10.4	(NA)	(NA)
3949	SPORTING AND ATHLETIC GOODS, NEC . .	48	17	1.2	6.8	.8	1.4	4.4	20.0	16.1	34.4	1.7	1.0	9.2
395	PENS, PENCILS, OFFICE, ART GOODS . . .	65	23	2.4	19.3	1.8	3.5	12.8	49.3	34.1	82.8	2.4	3.0	32.4
3952	LEAD PENCILS AND ART GOODS . . . . .	14	4	.5	4.4	.4	.6	2.2	9.8	5.0	14.9	(D)	EE	(D)
396	COSTUME JEWELRY AND NOTIONS. . . . .	57	27	2.9	18.3	2.4	4.2	13.0	31.6	20.5	53.5	1.7	2.1	17.6
3962	ARTIFICIAL FLOWERS . . . . .	17	5	.3	1.6	.2	.3	1.1	3.6	3.1	6.7	.1	(NA)	(NA)
399	MISCELLANEOUS MANUFACTURES . . . . .	348	104	11.2	86.6	8.5	15.3	53.8	180.9	124.4	308.7	8.3	8.1	92.8
3993	SIGNS AND ADVERTISING DISPLAYS . . . .	140	29	1.9	16.2	1.5	2.7	10.5	30.2	16.0	46.2	.8	2.0	20.1
3999	MANUFACTURING INDUSTRIES, NEC. . . .	180	61	7.5	55.3	5.5	9.6	32.9	103.5	80.5	189.5	5.4	4.1	45.7
--	ADMINISTRATIVE AND AUXILIARY . . . .	531	295	82.3	1 155.9	-	-	-	-	-	-	-	63.4	-

Note: The following symbols indicate employment size range for 1967:

AA less than 250 employees      EE 1,000 to 2,499 employees  
BB 250 to 499 employees      FF 2,500 employees and over  
CC 500 to 999 employees

- Represents zero. (NA) Not available. Because of a revision to this industry or industry group in the 1972 edition of the SIC manual, 1967 census data are not available on a comparable basis. (D) Withheld to avoid disclosing figures for individual companies. (Z) Less than half of the unit of measurement shown.

<sup>1</sup>The total cost of materials and value of shipments for industry groups shown may include extensive duplication arising from shipments between establishments in the same industry classification. (For a more complete explanation, see appendix.)

<sup>2</sup>Includes figures for industry groups which have been withheld from publication in order to (a) avoid disclosing figures for individual companies or (b) permit further checking of figures for smaller industry groups. Additional detail will appear in the final report for this State.

## Appendix A. SCOPE AND COVERAGE

This report is one of a series presenting preliminary information, by State, from the 1972 Census of Manufactures. The data will be superseded in a final report which, in turn, will be included in *Volume III, Area Statistics, 1972 Census of Manufactures*. The final report will include a comprehensive discussion of the concepts and definitions used in the census.

The census of manufactures covers each manufacturing establishment in the United States with one paid employee or more; manufacturing establishments with no employees are excluded. Firms which operated more than one establishment were required to file a separate report for each location. Companies which engaged in distinctly different lines of activity at one location were asked to submit separate reports if the company records permitted such a separation and the activities were of significant size.

This report includes figures for administrative offices, warehouses, garages, or other auxiliary units which service manufacturing establishments.

In the 1972 census, the approximately 120,000 manufacturing establishments with fewer than 10 employees were excused from filing reports. Under special arrangements which safeguarded the confidentiality of both tax and census records, data on payrolls, sales, and industry classification from the administrative records of the Social Security Administration and the Internal Revenue Service were made available to the Census Bureau for use in the 1972 Economic Censuses (retail and wholesale trade, service industries, construction industries, manufactures, and mineral industries). Estimates for data other than payrolls and sales for these small establishments were constructed from industry averages. The effect on industry aggregates is slight in most industries. For manufacturing as a whole, these small establishments account for less than 3 percent of the payrolls and value added.

Establishments are classified by industry in accordance with industry definitions described in the 1972 edition of the Standard Industrial Classification (SIC) Manual. For 1972, the SIC was significantly revised and the comparability with prior year's data for some industries was significantly affected. The comparability at the 2- and 3-digit SIC levels was less affected. The final volumes of the 1972 Census of Manufactures will contain a table relating aggregates based on the 1972 SIC with aggregates derived from classifying establishments according to the 1967 SIC definitions.

As in earlier censuses, a number of small establishments may have been misclassified as to industry. However, such possible misclassifications have significant effect on *none* of the statistics except the number of establishments. As indicated above, report forms were not mailed to very small establishments (fewer than 10 employees). The industry classifications for these establishments were assigned on the basis of brief descriptions of the general activity of the establishment. Where the description is incomplete or there are relatively fine lines of demarcation among industries or between manufacturing and nonmanufacturing activity, the code assigned to an establishment could differ from that which would have been assigned on the basis of more complete product information. Therefore, the total establishment count for individual industries should be viewed as an approximation rather than a precise measurement. The counts for establishments with 20 employees or more are more reliable than the total number of establishments.

More detailed figures for this State will appear in the final census reports. Final reports will also include a comprehensive discussion of such concepts as "industry" and "establishment," as well as the various statistical items such as "employment," "value of shipments," and "value added." Similar preliminary and final reports will be issued for other States during the coming months. A series of preliminary summary reports showing U.S. totals for each manufacturing industry and for each State are being issued. Final industry reports and final area reports will be published during 1974.

Order forms describing the individual reports and listing their prices may be obtained from any U.S. Department of Commerce district office or from the Publications Distribution Section, Social and Economic Statistics Administration, Washington, D.C. 20233.

The 1972 Census of Manufactures is the 29th census of manufacturing establishments in the United States. For 1972, it was conducted jointly with the censuses of mineral industries, construction industries, retail trade, wholesale trade, and selected services under authority of Title 13 of the United States Code. Title 13 specifies that a census of manufactures be conducted every 5 years and, as amended, to cover years ending in "2" and "7". Title 13 also authorizes an annual sample survey of manufacturing establishments in interim years.



## Appendix B. EXPLANATION OF TERMS

*(For a more complete discussion of these terms and the method of compiling the Census of Manufactures, see the "Introduction" to the 1967 Census of Manufactures, Volume III).*

**All Employees**—All full-time and part-time employees on the payrolls of operating manufacturing establishments for any part of the pay period ending nearest the 12th of the months specified on the report form. Included are all persons on paid sick leave, paid holidays, and paid vacations during these pay periods. Officers of corporations are included as employees; proprietors and partners of unincorporated firms are excluded. The "all employee" number is the average number of production workers for the midmonth payroll period of March, May, August, and November plus the number of nonproduction employees in mid-March.

**Number of Production Workers**—Workers (up through the working foreman level) engaged in fabricating, processing, assembling, inspecting, receiving, packing, warehousing, shipping (but not delivering), and maintenance, repair, janitorial, and watchman services, product development, auxiliary production for plant's own use (e.g., powerplant), recordkeeping, and other closely associated services. Proprietors and partners are excluded.

**Payroll**—This item includes all forms of compensation such as salaries, wages, commissions, dismissal pay, bonuses, vacation and sick leave pay, and compensation in kind, prior to such deductions as employees' Social Security contributions, withholding taxes, group insurance, union dues, and savings bonds. The total includes salaries of officers of these establishments, if a corporation; it excludes payments to the proprietor or partners, if an unincorporated concern. Respondents were told that in reporting they could follow the definition of payrolls used for calculating the Federal withholding tax.

**Man-Hours of Production Workers**—This total relates to production-worker man-hours worked or paid for at the plant including actual overtime hours (not straight-time equivalent hours). It excludes hours paid for vacation, holidays, or sick leave when the employee was not at the plant.

**Cost of Materials**—The term "Cost of Materials" refers to charges actually paid or payable for items consumed or put into production during the year, including freight and other direct charges incurred by the establishment in acquiring these materials. It includes the cost of materials or fuel consumed regardless of

whether these items were purchased by the establishment from other companies, transferred to it from other establishments of the same company, or withdrawn from inventory during the year. The establishment was requested to value materials transferred from other parts of the company at its approximate market value, not at cost of production. The important components of this cost item are (a) all raw materials, semifinished goods, parts, components, containers, scrap, and supplies put into production or used as operating supplies and for repair and maintenance during the year; (b) electric energy purchased; (c) fuels consumed for heat, power, or the generation of electricity; (d) work done by others on materials or parts furnished by manufacturing establishments (contract work); and (e) products bought and resold in the same condition.

**Value of Shipments**—The value of shipments is the received or receivable net selling value, f.o.b. plant (exclusive of freight and taxes), of all products shipped, both primary and secondary, as well as all miscellaneous receipts such as receipts for contract work performed for others, installation and repair, sales of scrap, and sale of products bought and resold without further processing. Included are all items made by the establishment or for it under contract from materials owned by it whether sold, transferred to other plants of the same company, or shipped on consignment. The net selling value of products made in one plant on a contract basis from materials owned by another was reported by the plant providing the materials.

In the case of multiunit companies, the manufacturer was requested to report the value of products transferred to other establishments of the same company at full economic value; i.e., to include not only the direct costs of production but also a reasonable proportion of "all other costs" (including company overhead) and profit.

**Duplication in Cost of Materials and Value of Products**—The aggregate cost of materials and value-of-shipments figures for industry groups and for all manufacturing industries may include large amounts of duplication since the products of some industries are used as materials by others. With some important exceptions, such as motor vehicles and parts, this duplication is not significant within individual industries but arises from the addition of the totals of related industries in successive stages of the production of a finished manufactured product. Examples are the addition of flour mills to bakeries in the food group and the addition of pulp mills to paper mills in the paper and allied products group of industries. Esti-



mates of this duplication indicate that the value of manufactured products exclusive of such duplication—the value of finished manufactures—approximates two-thirds of the total value of products.

Prior to 1962, the Bureau of the Census did not publish figures for cost of materials or value of shipments if they contained significant duplication. Effective with the 1962 annual survey these figures were shown at all industry levels for the United States to meet the requests for their use in studies in which the presence of an indeterminate amount of duplication is not a limiting factor. However, they are appropriately footnoted. Effective with the 1964 annual survey, these industry group totals are also shown at the State, standard metropolitan statistical area, and large-county level.

Even where there is no significant amount of duplication, value-of-shipments figures are deficient as measures of the relative economic importance of individual manufacturing industries or geographic areas because of the wide variation in ratio of materials, labor, and other processing costs to value of shipments among industries.

**Value Added by Manufacture**—This measure of manufacturing activity is derived by subtracting the cost of materials, supplies, containers, fuel, purchased electricity, and cost of resales contract work from the value of shipments for products manufactured plus resales and receipts for services rendered. The result of this calculation is adjusted by the net change in finished goods and work-in-process inventories between the beginning and end of the year. (In the few industries that report value of production rather than value of shipments, only changes in work-in-process inventories are used to adjust value added. In the shipbuilding and repairing industry, no inventory adjustment is made.)

“Value added” avoids the duplication in the value of shipments figure which results from the use of products of some establishments as materials by others. Value added is considered to be the best value measure available for comparing the relative economic importance of manufacturing among industries and geographic areas.

**Expenditures for Plant and Equipment**—Manufacturing establishments in operation and establishments under construction but not yet in operation, were asked to report their expenditures for (a) permanent additions and major alterations to the manufacturing establishment, and (b) new machinery and equipment used for replacement purposes and additions to plant capacity if they are of the type for which depreciation accounts are ordinarily maintained.

These totals exclude expenditures for new facilities and equipment leased from nonmanufacturing concerns; new facilities owned by the Federal Government but operated under contract by private companies; and plant and equipment furnished to the manufacturer by communities and nonprofit organizations. Expenditures for used plant and equipment (although reported in the census), expenditures for land, and cost of maintenance and repairs charged as current operating expense are also omitted from the figures for new capital expenditures.

**Central Administrative Offices and Auxiliary Units**—In the 1972 census as in previous years, respondents were asked to file separate reports for central administrative offices or auxiliary units which were (1) at different locations from the establishments served or, (2) at the same location as one of these establishments but were not operated as an integral part thereof and served two or more establishments. The functions of employees in central administrative offices include general company policy determination, planning and management (that is, company purchasing, accounting, general engineering, direction of company personnel matters, and legal and patent matters). Auxiliaries are storage facilities, garages, repair shops, purchasing offices, sales promotion offices, and research laboratories serving the plants or central management of the company.

**Standard Metropolitan Statistical Areas**—Standard metropolitan statistical areas (SMSA) are integrated economic and social units with a large volume of daily travel and communication between the central city and outlying parts of the area.<sup>1</sup> Each area (except in New England) consists of one whole county or more. An area may contain not only highly industrialized counties but also adjoining counties which, though primarily residential in character, contribute significantly to the industrial counties' labor force and are socially and economically integrated with the central city. These areas are defined by the Federal Committee on Standard Metropolitan Statistical Areas of the Office of Management and Budget for general-purpose use throughout the Federal Government in presenting economic and social data. In the New England States, similar intergration criteria are applied in defining

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<sup>1</sup> Each standard metropolitan statistical area must include either (1) a city with 50,000 or more inhabitants, or (2) a city having a population of at least 25,000 which (a) with the addition of the population of contiguous places has a population density of at least 1,000 persons per square mile; (b) constitutes, for general economic and social purposes, a single community with a combined population of at least 50,000; and (c) includes a total population of at least 75,000 in the county or counties in which the city and contiguous places are located.



SMSA's on a city and town basis because towns rather than counties are regarded as the significant unit in this region of the country.

The requirement that each SMSA consist of county units (except in New England) sometimes results in the inclusion in an area of considerable amount of territory which would not ordinarily be considered "metropolitan," much less "industrial." It is recognized that metropolitan areas could be more accurately defined in terms of smaller area segments such as minor civil

divisions, but the usefulness of areas so defined would be limited by the fact that many types of economic and social data are available only on a county basis.

Each SMSA is designated by the name of the principal city of the area. In addition to the name of the principal city, the area title may include one or two additional city names.

The data for SMSA's which changed definition since the 1967 census have not been retabulated on the new basis for years prior to 1972.

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**Social and Economic Statistics Administration**  
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## New Mexico

Value added by manufacturing in 1972 in the State of New Mexico amounted to \$366 million, a 34-percent increase from 1971 and a 79-percent increase from 1967.

This report presents preliminary results from the 1972 Census of Manufactures for the State, its Standard Metropolitan Statistical Area, and its counties.

Data are provided for industry groups within the State. Historical data, back to 1958, are included for the State as a whole,

and 1967 figures on employment and value added are provided for the smaller areas.

The figures in this report have been subjected to only preliminary review and must be regarded as approximations of the final census figures. No adjustments have been made in the value figures for changes in price level.

For an explanation of the terms used in the tables, see the appendix at the end of this report.

TABLE 1. General Statistics for the State: 1972 and Earlier Years

(See appendix, Explanation of Terms)

Year	Establishments		All employees <sup>1</sup>		Production workers			Value added by manufacture	Cost of materials <sup>2</sup>	Value of shipments <sup>2</sup>	Capital expenditures, new
	Total	With 20 employees or more	Number	Payroll	Number	Man-hours	Wages				
	(number)	(number)	(1,000)	(million dollars)	(1,000)	(millions)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(million dollars)
NEW MEXICO											
1972 Census .....	914	225	23.9	162.3	17.2	33.3	98.7	366.2	569.5	920.7	30.4
1971 ASM .....	(NA)	(NA)	22.7	141.7	17.0	32.8	88.8	272.9	496.6	765.5	43.9
1970 ASM .....	(NA)	(NA)	21.6	124.7	15.9	30.3	78.6	227.3	488.0	712.8	12.2
1969 ASM .....	(NA)	(NA)	18.4	110.0	13.4	27.2	69.7	207.2	462.2	666.9	19.2
1968 ASM .....	(NA)	(NA)	16.4	100.1	11.7	24.1	60.7	194.3	386.3	579.1	12.0
1967 Census .....	749	169	16.9	98.6	11.3	22.3	55.6	204.5	284.3	486.3	10.6
1966 ASM .....	(NA)	(NA)	15.8	89.3	10.6	21.1	50.5	148.1	354.0	499.1	11.5
1965 ASM .....	(NA)	(NA)	16.1	87.6	10.6	21.1	48.8	134.5	318.1	463.5	12.7
1964 ASM .....	(NA)	(NA)	15.9	83.5	10.3	20.9	47.5	150.2	284.6	406.7	10.0
1963 Census .....	742	169	15.3	82.1	10.2	20.7	47.2	149.6	(NA)	(NA)	10.4
1962 ASM .....	(NA)	(NA)	14.0	72.3	9.3	18.8	42.7	131.4	(NA)	(NA)	7.2
1961 ASM .....	(NA)	(NA)	13.4	66.0	9.0	18.6	40.1	116.0	(NA)	(NA)	9.0
1960 ASM .....	(NA)	(NA)	13.7	65.8	9.3	19.6	40.5	119.4	(NA)	(NA)	19.4
1959 ASM .....	(NA)	(NA)	13.0	63.7	9.5	20.0	39.5	112.3	(NA)	(NA)	18.7
1958 Census .....	668	153	13.7	59.4	9.8	19.2	38.0	107.6	(NA)	(NA)	24.5

Note: "ASM" data are based on a representative sample of manufacturing establishments canvassed in the Annual Survey of Manufactures. These estimates may differ from the results of a complete canvass of all manufacturing establishments. The standard errors associated with these estimates are published in the annual survey of manufactures volumes for this period. For comparative purposes the 1972 ASM estimate for the State of New Mexico was 24 thousand employees and \$343 million in value added with corresponding standard error of estimate 6 and 7.

(NA) Not available.

<sup>1</sup>Includes employment and payroll at central administrative offices and auxiliary units. (For a definition of these units, see appendix.)

<sup>2</sup>The total cost of materials and value of shipments may include extensive duplication arising from shipments between establishments in the same industry classification. (For a more complete explanation, see appendix.)

TABLE 2. General Statistics for the State, Standard Metropolitan Statistical Areas, and Counties: 1972 and 1967

(See appendix, Explanation of Terms)

State, standard metropolitan statistical areas, and counties <sup>1</sup>	1972										1967		
	Establishments		All employees <sup>2</sup>		Production workers			Value added by manu- facture	Cost of materials <sup>3</sup>	Value of shipments <sup>3</sup>	Capital ex- pendi- tures, new	All employees	Value added by manu- facture
	Total	With 20 employees or more	Number	Payroll	Number	Man-hours	Wages						
	(number)	(number)	(1,000)	(million dollars)	(1,000)	(million)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(1,000)	(million dollars)
NEW MEXICO, TOTAL . . . . .	914	225	23.9	162.3	17.2	33.3	98.7	366.2	569.5	920.7	30.4	16.9	204.5
STANDARD METROPOLITAN STATISTICAL AREAS <sup>4</sup>													
ALBUQUERQUE . . . . .	372	96	11.9	84.7	8.6	16.8	52.0	181.1	167.2	333.1	14.5	7.8	94.4
COUNTIES													
BERNALILLO . . . . .	359	90	11.3	80.9	8.1	15.7	49.1	173.2	162.0	320.2	14.1	7.8	94.4
CHAVES . . . . .	43	13	1.6	9.1	1.1	2.3	5.4	21.9	45.3	66.8	2.0	1.0	9.5
COLFAX . . . . .	23	6	.4	2.4	.4	.8	1.7	2.2	3.9	7.4	.2	.3	3.1
CURRY . . . . .	39	8	.7	4.8	.5	.9	3.1	16.8	102.1	118.1	.6	.5	6.8
DONA ANA . . . . .	43	12	1.4	6.2	1.0	2.0	4.9	20.4	13.3	33.5	2.5	1.2	15.1
EDDY . . . . .	33	11	.9	8.2	.6	1.3	4.6	12.7	10.7	23.2	.5	.5	8.2
LEA . . . . .	44	9	.6	5.1	.4	.8	2.7	11.0	14.2	25.3	.8	.4	6.0
MC KINLEY . . . . .	22	9	1.0	6.1	.8	1.4	4.4	16.6	37.2	53.4	1.0	.8	12.5
OTERO . . . . .	31	10	.8	4.5	.6	.9	2.0	8.8	7.6	16.3	3.6	.4	4.0
QUAY . . . . .	9	2	.3	1.9	.2	.4	1.1	3.6	3.9	7.5	.1	(2)	.3
RIO ARriba . . . . .	21	5	.4	2.4	.4	.7	1.8	4.6	3.7	8.3	.4	.2	1.8
SANDOVAL . . . . .	13	6	.6	3.8	.5	1.1	2.9	7.9	5.2	12.9	.4	.2	1.3
SAN JUAN . . . . .	30	10	1.2	6.8	.7	1.4	3.4	17.2	17.7	34.7	.7	.9	3.2
SANTA FE . . . . .	61	6	.7	4.8	.4	.9	2.7	12.1	5.9	17.5	1.0	.8	8.3

(Z) Less than half of the unit of measurement shown.

<sup>1</sup>Some counties were withheld from publication in order to (a) avoid disclosing figures for individual companies or (b) permit further checking of the figures for smaller counties. Additional detail will appear in the final report for this State.<sup>2</sup>Includes employment and payroll at central administrative offices and auxiliary units. (For a definition of these units, see appendix.)<sup>3</sup>The total cost of materials and value of shipments may include extensive duplication arising from shipments between establishments in the same industry classification. (For a more complete explanation, see appendix.)<sup>4</sup>The standard metropolitan statistical area in this State is defined as follows:

ALBUQUERQUE SMSA: Consists of Bernalillo and Sandoval counties, NM.



TABLE 3. General Statistics for the State, by Industry Groups and Industries: 1972 and 1967

(See appendix, Explanation of Terms)

Code	Industry	1972										1967		
		Establishments		All employees		Production workers			Value added by manufacture	Cost of materials <sup>1</sup>	Value of shipments <sup>1</sup>	Capital expenditures, 1967	All employees	Value added by manufacture
		Total	With 20 employees or more	Number	Payroll	Number	Man-hours	Wages						
		(number)	(number)	(1,000)	(million dollars)	(1,000)	(million)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(1,000)	(million dollars)
	ALL INDUSTRIES, TOTAL <sup>2</sup> . . . .	914	225	23.9	162.3	17.2	33.3	98.7	366.2	569.5	920.7	30.6	16.9	0 .
20	FOOD AND KINDRED PRODUCTS. . . .	141	48	3.8	25.2	2.3	4.5	12.2	68.3	203.1	271.1	6.4	. .	. .
201	MEAT PRODUCTS. . . . .	14	6	1.1	7.5	.8	1.7	5.1	18.6	133.8	152.6	1.7	.8	8.7
202	DAIRY PRODUCTS. . . . .	15	6	.5	3.6	.2	.4	1.2	13.3	26.3	39.2	.7	.7	1 .
204	GRAIN MILL PRODUCTS. . . . .	11	4	.3	1.3	.2	.3	.8	5.1	9.8	14.6	(D)	AA	11 .
205	BAKERY PRODUCTS. . . . .	16	5	.7	4.8	.3	.6	1.7	11.4	8.4	19.9	.5	.7	7.5
2051	BREAD, CAKE, AND RELATED PRODUCTS. .	16	5	.7	4.8	.3	.6	1.7	11.4	8.4	19.9	.5	.7	7.5
208	BEVERAGES. . . . .	22	14	.7	4.5	.3	.5	1.3	11.3	13.3	24.7	2.4	.6	7.6
2084	BOTTLED AND CANNED SOFT DRINKS . .	22	14	.7	4.5	.3	.5	1.3	11.3	13.3	24.7	2.4	.6	7.6
209	MISC. FOODS AND KINDRED PRODUCTS .	32	5	.3	2.0	.2	.5	1.1	4.9	4.2	9.1	.2	(NA)	(NA)
2090	FOOD PREPARATIONS, NEC . . . . .	22	5	.3	1.5	.2	.3	.7	3.9	4.0	7.9	.2	.2	1.6
23	APPAREL, OTHER TEXTILE PRODUCTS	25	7	1.8	7.3	1.7	2.9	6.2	15.9	12.4	28.4	.7	CC	(NA)
24	LUMBER AND WOOD PRODUCTS . . . .	114	36	2.8	16.3	2.5	4.5	13.5	31.5	39.3	71.3	2.1	EE	(D)
2411	LOGGING CAMPS, LOGGING CONTRACTORS .	24	4	.3	1.9	.3	.7	1.8	3.5	2.0	5.5	.4	.2	1.9
242	SAWMILLS AND PLANING MILLS . . . .	40	18	1.5	8.7	1.4	2.3	7.1	18.3	18.5	37.3	1.1	1.5	8.6
243	MILLWORK, PLYWOOD, STRUC. MEMBERS.	30	11	.6	4.0	.5	1.0	3.3	6.6	13.6	20.2	.4	(NA)	(NA)
2431	MILLWORK . . . . .	20	8	.4	2.8	.4	.8	2.4	5.7	10.7	16.4	.2	(NA)	(NA)
25	FURNITURE AND FIXTURES . . . . .	33	0	.4	2.1	.4	.6	1.6	3.6	3.0	6.5	.2	(NA)	(NA)
27	PRINTING AND PUBLISHING. . . . .	141	22	1.8	13.3	.9	1.8	6.7	30.6	9.8	40.3	4.9	1.5	16.8
2711	NEWSPAPERS . . . . .	42	14	1.2	9.1	.5	1.0	4.1	22.4	5.3	27.7	4.3	1.1	12.7
275	COMMERCIAL PRINTING. . . . .	77	7	.4	3.0	.3	.6	2.0	5.9	3.7	9.5	.5	(NA)	(NA)
28	CHEMICALS AND ALLIED PRODUCTS. .	21	7	.8	8.8	.4	.9	4.3	18.9	10.5	29.1	1.0	.3	4.7
32	STONE, CLAY, AND GLASS PRODUCTS.	41	12	1.4	11.8	1.0	2.1	7.7	31.7	25.2	56.4	4.2	1.0	16.4
327	CONCRETE, GYPSUM, PLASTER PRODUCTS	61	15	1.1	9.1	.7	1.6	5.8	21.6	20.1	41.5	3.8	.8	11.3
3273	READY-MIXED CONCRETE . . . . .	33	7	.6	5.0	.4	.8	3.2	10.9	11.2	22.1	2.6	.4	4.3
34	FABRICATED METAL PRODUCTS. . . .	47	11	.9	6.8	.7	1.4	4.1	10.9	11.8	22.2	1.0	(NA)	(NA)
344	FABRICATED STRUCTURAL METAL PROD .	32	11	.9	6.2	.6	1.3	3.7	9.8	11.2	20.5	.9	.4	4.5
3441	FABRICATED STRUCTURAL METAL PRODUCTS	0	3	.4	2.8	.2	.5	1.6	4.9	5.3	9.8	.3	(NA)	(NA)
35	MACHINERY, EXCEPT ELECTRICAL. .	109	16	2.5	16.5	1.8	3.6	11.1	37.8	34.3	60.4	2.0	.6	7.6
359	MISC. MACHINERY, EXCEPT ELECTRICAL	75	5	1.1	6.3	.8	1.7	4.3	14.1	5.7	19.4	.4	(NA)	(NA)
3590	MACHINERY, EXCEPT ELECTRICAL, NEC. .	75	5	1.1	6.3	.8	1.7	4.3	14.1	5.7	19.4	.4	(NA)	(NA)
36	ELECTRIC, ELECTRONIC EQUIPMENT.	37	14	2.2	12.9	1.7	3.3	7.2	34.1	20.4	49.9	4.7	(NA)	(NA)
366	COMMUNICATION EQUIPMENT. . . . .	11	8	1.7	10.6	1.3	2.7	6.0	26.6	16.6	39.6	(D)	.4	6.0
37	TRANSPORTATION EQUIPMENT . . . .	27	7	1.5	14.2	1.1	2.1	8.5	18.9	19.8	38.7	.7	(NA)	(NA)
38	INSTRUMENTS AND RELATED PRODUCTS	12	4	.6	4.2	.4	.8	2.5	7.0	2.8	9.8	.4	(NA)	(NA)
382	MEASURING AND CONTROLLING DEVICES.	7	3	.5	3.8	.3	.7	2.2	6.1	2.7	8.8	.3	AA	(D)
39	MISC. MANUFACTURING INDUSTRIES .	60	7	1.0	5.9	.8	1.4	3.4	11.5	5.5	16.9	.4	.7	5.4
391	JEWELRY, SILVERWARE, PLATED WARE.	11	3	.6	3.5	.5	.9	1.8	6.4	2.8	9.2	.1	BB	(D)
—	ADMINISTRATIVE AND AUXILIARY . .	14	6	.5	4.9	—	—	—	—	—	—	—	.3	—

Note: The following symbols indicate employment size range for 1967:

AA less than 250 employees      EE 1,000 to 2,499 employees  
BB 250 to 499 employees      FF 2,500 employees and over  
CC 500 to 999 employees

- Represents zero. (NA) Not available. (D) Withheld to avoid disclosing figures for individual companies.

<sup>1</sup>The total cost of materials and value of shipments for industry groups shown may include extensive duplication arising from shipments between establishments in the same industry classification. (For a more complete explanation, see appendix.)<sup>2</sup>Includes figures for industry groups which have been withheld from publication in order to (a) avoid disclosing figures for individual companies or (b) permit further checking of figures for smaller industry groups. Additional detail will appear in the final report for this State.

## Appendix A. SCOPE AND COVERAGE

This report is one of a series presenting preliminary information, by State, from the 1972 Census of Manufactures. The data will be superseded in a final report which, in turn, will be included in *Volume III, Area Statistics, 1972 Census of Manufactures*. The final report will include a comprehensive discussion of the concepts and definitions used in the census.

The census of manufactures covers each manufacturing establishment in the United States with one paid employee or more; manufacturing establishments with no employees are excluded. Firms which operated more than one establishment were required to file a separate report for each location. Companies which engaged in distinctly different lines of activity at one location were asked to submit separate reports if the company records permitted such a separation and the activities were of significant size.

This report includes figures for administrative offices, warehouses, garages, or other auxiliary units which service manufacturing establishments.

In the 1972 census, the approximately 120,000 manufacturing establishments with fewer than 10 employees were excused from filing reports. Under special arrangements which safeguarded the confidentiality of both tax and census records, data on payrolls, sales, and industry classification from the administrative records of the Social Security Administration and the Internal Revenue Service were made available to the Census Bureau for use in the 1972 Economic Censuses (retail and wholesale trade, service industries, construction industries, manufactures, and mineral industries). Estimates for data other than payrolls and sales for these small establishments were constructed from industry averages. The effect on industry aggregates is slight in most industries. For manufacturing as a whole, these small establishments account for less than 3 percent of the payrolls and value added.

Establishments are classified by industry in accordance with industry definitions described in the 1972 edition of the Standard Industrial Classification (SIC) Manual. For 1972, the SIC was significantly revised and the comparability with prior year's data for some industries was significantly affected. The comparability at the 2- and 3-digit SIC levels was less affected. The final volumes of the 1972 Census of Manufactures will contain a table relating aggregates based on the 1972 SIC with aggregates derived from classifying establishments according to the 1967 SIC definitions.

As in earlier censuses, a number of small establishments may have been misclassified as to industry. However, such possible misclassifications have significant effect on *none* of the statistics except the number of establishments. As indicated above, report forms were not mailed to very small establishments (fewer than 10 employees). The industry classifications for these establishments were assigned on the basis of brief descriptions of the general activity of the establishment. Where the description is incomplete or there are relatively fine lines of demarcation among industries or between manufacturing and nonmanufacturing activity, the code assigned to an establishment could differ from that which would have been assigned on the basis of more complete product information. Therefore, the total establishment count for individual industries should be viewed as an approximation rather than a precise measurement. The counts for establishments with 20 employees or more are more reliable than the total number of establishments.

More detailed figures for this State will appear in the final census reports. Final reports will also include a comprehensive discussion of such concepts as "industry" and "establishment," as well as the various statistical items such as "employment," "value of shipments," and "value added." Similar preliminary and final reports will be issued for other States during the coming months. A series of preliminary summary reports showing U.S. totals for each manufacturing industry and for each State are being issued. Final industry reports and final area reports will be published during 1974.

Order forms describing the individual reports and listing their prices may be obtained from any U.S. Department of Commerce district office or from the Publications Distribution Section, Social and Economic Statistics Administration, Washington, D.C. 20233.

The 1972 Census of Manufactures is the 29th census of manufacturing establishments in the United States. For 1972, it was conducted jointly with the censuses of mineral industries, construction industries, retail trade, wholesale trade, and selected services under authority of Title 13 of the United States Code. Title 13 specifies that a census of manufactures be conducted every 5 years and, as amended, to cover years ending in "2" and "7". Title 13 also authorizes an annual sample survey of manufacturing establishments in interim years.



## Appendix B. EXPLANATION OF TERMS

*(For a more complete discussion of these terms and the method of compiling the Census of Manufactures, see the "Introduction" to the 1967 Census of Manufactures, Volume III).*

**All Employees**—All full-time and part-time employees on the payrolls of operating manufacturing establishments for any part of the pay period ending nearest the 12th of the months specified on the report form. Included are all persons on paid sick leave, paid holidays, and paid vacations during these pay periods. Officers of corporations are included as employees; proprietors and partners of unincorporated firms are excluded. The "all employee" number is the average number of production workers for the midmonth payroll period of March, May, August, and November plus the number of nonproduction employees in mid-March.

**Number of Production Workers**—Workers (up through the working foreman level) engaged in fabricating, processing, assembling, inspecting, receiving, packing, warehousing, shipping (but not delivering), and maintenance, repair, janitorial, and watchman services, product development, auxiliary production for plant's own use (e.g., powerplant), recordkeeping, and other closely associated services. Proprietors and partners are excluded.

**Payroll**—This item includes all forms of compensation such as salaries, wages, commissions, dismissal pay, bonuses, vacation and sick leave pay, and compensation in kind, prior to such deductions as employees' Social Security contributions, withholding taxes, group insurance, union dues, and savings bonds. The total includes salaries of officers of these establishments, if a corporation; it excludes payments to the proprietor or partners, if an unincorporated concern. Respondents were told that in reporting they could follow the definition of payrolls used for calculating the Federal withholding tax.

**Man-Hours of Production Workers**—This total relates to production-worker man-hours worked or paid for at the plant including actual overtime hours (not straight-time equivalent hours). It excludes hours paid for vacation, holidays, or sick leave when the employee was not at the plant.

**Cost of Materials**—The term "Cost of Materials" refers to charges actually paid or payable for items consumed or put into production during the year, including freight and other direct charges incurred by the establishment in acquiring these materials. It includes the cost of materials or fuel consumed regardless of

whether these items were purchased by the establishment from other companies, transferred to it from other establishments of the same company, or withdrawn from inventory during the year. The establishment was requested to value materials transferred from other parts of the company at its approximate market value, not at cost of production. The important components of this cost item are (a) all raw materials, semifinished goods, parts, components, containers, scrap, and supplies put into production or used as operating supplies and for repair and maintenance during the year; (b) electric energy purchased; (c) fuels consumed for heat, power, or the generation of electricity; (d) work done by others on materials or parts furnished by manufacturing establishments (contract work); and (e) products bought and resold in the same condition.

**Value of Shipments**—The value of shipments is the received or receivable net selling value, f.o.b. plant (exclusive of freight and taxes), of all products shipped, both primary and secondary, as well as all miscellaneous receipts such as receipts for contract work performed for others, installation and repair, sales of scrap, and sale of products bought and resold without further processing. Included are all items made by the establishment or for it under contract from materials owned by it whether sold, transferred to other plants of the same company, or shipped on consignment. The net selling value of products made in one plant on a contract basis from materials owned by another was reported by the plant providing the materials.

In the case of multiunit companies, the manufacturer was requested to report the value of products transferred to other establishments of the same company at full economic value; i.e., to include not only the direct costs of production but also a reasonable proportion of "all other costs" (including company overhead) and profit.

**Duplication in Cost of Materials and Value of Products**—The aggregate cost of materials and value-of-shipments figures for industry groups and for all manufacturing industries may include large amounts of duplication since the products of some industries are used as materials by others. With some important exceptions, such as motor vehicles and parts, this duplication is not significant within individual industries but arises from the addition of the totals of related industries in successive stages of the production of a finished manufactured product. Examples are the addition of flour mills to bakeries in the food group and the addition of pulp mills to paper mills in the paper and allied products group of industries. Esti-



mates of this duplication indicate that the value of manufactured products exclusive of such duplication—the value of finished manufactures—approximates two-thirds of the total value of products.

Prior to 1962, the Bureau of the Census did not publish figures for cost of materials or value of shipments if they contained significant duplication. Effective with the 1962 annual survey these figures were shown at all industry levels for the United States to meet the requests for their use in studies in which the presence of an indeterminate amount of duplication is not a limiting factor. However, they are appropriately footnoted. Effective with the 1964 annual survey, these industry group totals are also shown at the State, standard metropolitan statistical area, and large-county level.

Even where there is no significant amount of duplication, value-of-shipments figures are deficient as measures of the relative economic importance of individual manufacturing industries or geographic areas because of the wide variation in ratio of materials, labor, and other processing costs to value of shipments among industries.

**Value Added by Manufacture**—This measure of manufacturing activity is derived by subtracting the cost of materials, supplies, containers, fuel, purchased electricity, and cost of resale contract work from the value of shipments for products manufactured plus resale and receipts for services rendered. The result of this calculation is adjusted by the net change in finished goods and work-in-process inventories between the beginning and end of the year. (In the few industries that report value of production rather than value of shipments, only changes in work-in-process inventories are used to adjust value added. In the shipbuilding and repairing industry, no inventory adjustment is made.)

“Value added” avoids the duplication in the value of shipments figure which results from the use of products of some establishments as materials by others. Value added is considered to be the best value measure available for comparing the relative economic importance of manufacturing among industries and geographic areas.

**Expenditures for Plant and Equipment**—Manufacturing establishments in operation and establishments under construction but not yet in operation, were asked to report their expenditures for (a) permanent additions and major alterations to the manufacturing establishment, and (b) new machinery and equipment used for replacement purposes and additions to plant capacity if they are of the type for which depreciation accounts are ordinarily maintained.

These totals exclude expenditures for new facilities and equipment leased from nonmanufacturing concerns; new facilities owned by the Federal Government but operated under contract by private companies; and plant and equipment furnished to the manufacturer by communities and nonprofit organizations. Expenditures for used plant and equipment (although reported in the census), expenditures for land, and cost of maintenance and repairs charged as current operating expense are also omitted from the figures for new capital expenditures.

**Central Administrative Offices and Auxiliary Units**—In the 1972 census as in previous years, respondents were asked to file separate reports for central administrative offices or auxiliary units which were (1) at different locations from the establishments served or, (2) at the same location as one of these establishments but were not operated as an integral part thereof and served two or more establishments. The functions of employees in central administrative offices include general company policy determination, planning and management (that is, company purchasing, accounting, general engineering, direction of company personnel matters, and legal and patent matters). Auxiliaries are storage facilities, garages, repair shops, purchasing offices, sales promotion offices, and research laboratories serving the plants or central management of the company.

**Standard Metropolitan Statistical Areas**—Standard metropolitan statistical areas (SMSA) are integrated economic and social units with a large volume of daily travel and communication between the central city and outlying parts of the area.<sup>1</sup> Each area (except in New England) consists of one whole county or more. An area may contain not only highly industrialized counties but also adjoining counties which, though primarily residential in character, contribute significantly to the industrial counties' labor force and are socially and economically integrated with the central city. These areas are defined by the Federal Committee on Standard Metropolitan Statistical Areas of the Office of Management and Budget for general-purpose use throughout the Federal Government in presenting economic and social data. In the New England States, similar intergration criteria are applied in defining

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<sup>1</sup> Each standard metropolitan statistical area must include either (1) a city with 50,000 or more inhabitants, or (2) a city having a population of at least 25,000 which (a) with the addition of the population of contiguous places has a population density of at least 1,000 persons per square mile; (b) constitutes, for general economic and social purposes, a single community with a combined population of at least 50,000; and (c) includes a total population of at least 75,000 in the county or counties in which the city and contiguous places are located.



SMSA's on a city and town basis because towns rather than counties are regarded as the significant unit in this region of the country.

The requirement that each SMSA consist of county units (except in New England) sometimes results in the inclusion in an area of considerable amount of territory which would not ordinarily be considered "metropolitan," much less "industrial." It is recognized that metropolitan areas could be more accurately defined in terms of smaller area segments such as minor civil

divisions, but the usefulness of areas so defined would be limited by the fact that many types of economic and social data are available only on a county basis.

Each SMSA is designated by the name of the principal city of the area. In addition to the name of the principal city, the area title may include one or two additional city names.

The data for SMSA's which changed definition since the 1967 census have not been retabulated on the new basis for years prior to 1972.

**U.S. DEPARTMENT OF COMMERCE**  
**Social and Economic Statistics Administration**  
BUREAU OF THE CENSUS  
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# 1972 CENSUS OF MANUFACTURES

## AREA SERIES

C72(P)-S33

Issued March 1974

U. S. DEPARTMENT OF COMMERCE • Social and Economic Statistics Administration • BUREAU OF THE CENSUS

## New York

Value added by manufacturing in 1972 in the State of New York amounted to \$30,775 million, a 7-percent increase from 1971 and a 22-percent increase from 1967.

This report presents preliminary results from the 1972 Census of Manufactures for the State, its Standard Metropolitan Statistical Areas, and its counties.

Data are provided for industry groups within the State. Historical data, back to 1958, are included for the State as a whole,

and 1967 figures on employment and value added are provided for the smaller areas.

The figures in this report have been subjected to only preliminary review and must be regarded as approximations of the final census figures. No adjustments have been made in the value figures for changes in price level.

For an explanation of the terms used in the tables, see the appendix at the end of this report.

TABLE 1. General Statistics for the State: 1972 and Earlier Years

(See appendix, Explanation of Terms)

Year	Establishments		All employees <sup>1</sup>		Production workers			Value added by manufacture	Cost of materials <sup>2</sup>	Value of shipments <sup>2</sup>	Capital expenditures, new
	Total	With 20 employees or more	Number	Payroll	Number	Man-hours	Wages				
	(number)	(number)	(1,000)	(million dollars)	(1,000)	(millions)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(million dollars)
NEW YORK											
1972 Census .....	38,187	12,900	1,691.4	16,216.4	1,076.5	2,078.0	8,196.4	30,774.6	28,043.5	58,596.4	1,495.0
1971 ASM .....	(NA)	(NA)	1,701.9	15,263.4	1,076.1	2,066.3	7,648.0	28,862.2	25,961.4	54,936.6	1,431.7
1970 ASM .....	(NA)	(NA)	1,828.2	15,262.5	1,173.6	2,266.3	7,751.8	28,463.2	25,333.8	53,526.6	1,519.0
1969 ASM .....	(NA)	(NA)	1,939.7	15,321.0	1,270.0	2,476.3	8,017.8	28,384.0	26,637.0	54,891.0	1,594.0
1968 ASM .....	(NA)	(NA)	1,910.8	14,423.8	1,263.5	2,473.6	7,663.4	26,931.4	25,177.2	51,960.4	1,342.6
1967 Census .....	42,911	14,730	1,929.3	13,851.5	1,284.5	2,509.8	7,334.7	25,246.7	24,458.6	49,418.7	1,310.3
1966 ASM .....	(NA)	(NA)	1,933.5	13,097.9	1,291.6	2,549.9	6,979.8	24,588.3	24,246.0	48,231.5	1,186.2
1965 ASM .....	(NA)	(NA)	1,885.9	12,288.2	1,265.3	2,497.4	6,632.0	22,694.2	22,478.8	44,848.1	1,098.4
1964 ASM .....	(NA)	(NA)	1,860.6	11,861.1	1,238.1	2,453.5	6,381.1	20,839.7	21,055.1	41,809.9	939.8
1963 Census .....	47,041	15,022	1,853.0	11,289.7	1,247.8	2,431.4	6,163.5	19,539.5	(NA)	(NA)	783.4
1962 ASM .....	(NA)	(NA)	1,906.8	10,899.2	1,281.6	2,495.7	5,966.7	19,124.7	(NA)	(NA)	758.0
1961 ASM .....	(NA)	(NA)	1,902.6	10,447.6	1,285.7	2,493.0	5,744.8	18,083.1	(NA)	(NA)	681.8
1960 ASM .....	(NA)	(NA)	1,966.4	10,474.2	1,340.7	2,597.0	5,847.9	18,012.8	(NA)	(NA)	741.5
1959 ASM .....	(NA)	(NA)	1,963.9	10,179.9	1,347.9	2,614.9	5,728.9	17,514.2	(NA)	(NA)	696.1
1958 Census .....	49,441	15,000	1,915.9	9,627.7	1,303.1	2,487.1	5,423.6	15,892.6	(NA)	(NA)	792.2

Note: "ASM" data are based on a representative sample of manufacturing establishments canvassed in the Annual Survey of Manufactures. These estimates may differ from the results of a complete canvass of all manufacturing establishments. The standard errors associated with these estimates are published in the annual survey of manufactures volumes for this period. For comparative purposes, the 1972 ASM estimate for the State of New York was 1,662 thousand employees, and \$30,691 million in value added with corresponding standard error of estimate of 1 and 1.

NA: Not available.

<sup>1</sup>Includes employment and payroll at central administrative offices and auxiliary units. (For a definition of these units, see appendix.)

<sup>2</sup>The total cost of materials and value of shipments may include extensive duplication arising from shipments between establishments in the same industry classification. (For a more complete explanation, see appendix.)

TABLE 2. General Statistics for the State, Standard Metropolitan Statistical Areas, and Counties: 1972 and 1967

(See appendix, Explanation of Terms)

State, standard metropolitan statistical areas, and counties <sup>1</sup>	1972											1967	
	Establishments		All employees <sup>2</sup>		Production workers			Value added by manufacture	Cost of materials <sup>3</sup>	Value of shipments <sup>3</sup>	Capital expenditures, new	All employees	Value added by manufacture
	Total	With 20 employees or more	Number	Payroll	Number	Man-hours	Wages						
	(number)	(number)	(1,000)	(million dollars)	(1,000)	(million)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(1,000)	(million dollars)
NEW YORK, TOTAL . . . . .	38 187	12 900	1 691.4	16 216.4	1 076.5	2 078.0	8 196.4	30 774.6	28 043.5	58 596.4	1 495.0	1 929.2	25 246.7
STANDARD METROPOLITAN STATISTICAL AREAS <sup>4</sup>													
ALBANY-SCHENECTADY-TROY . . . . .	730	308	67.0	677.7	41.6	84.3	352.9	1 319.2	1 115.3	2 423.8	75.6	65.3	892.5
BINGHAMTON . . . . .	350	149	36.3	376.2	21.2	42.0	175.2	679.3	842.0	1 581.8	32.6	46.1	534.7
PORTION IN NEW YORK . . . . .	299	126	34.2	363.8	19.4	38.6	165.2	658.1	829.3	1 549.8	31.7	43.4	512.2
PORTION IN PENNSYLVANIA . . . . .	51	23	2.1	12.4	1.8	3.4	10.0	21.2	12.7	32.0	.9	2.7	22.4
BUFFALO . . . . .	1 602	638	143.4	1 517.7	106.5	212.7	1 048.1	3 126.0	3 249.6	6 344.3	224.5	176.1	2 653.4
ELMIRA . . . . .	127	55	13.9	129.1	9.7	19.4	77.4	218.4	232.7	445.3	15.2	17.7	226.0
NASSAU-SUFFOLK . . . . .	4 141	1 198	153.2	1 508.2	98.2	188.1	771.7	2 541.5	2 079.0	4 481.6	113.0	164.8	2 229.7
NEW YORK . . . . .	28 249	9 355	961.2	8 841.0	590.4	1 111.0	4 005.5	15 061.3	15 058.5	29 976.3	579.1	1 091.0	13 056.9
PORTION IN NEW YORK . . . . .	25 852	8 518	850.0	7 786.4	522.9	982.8	3 490.1	13 402.5	13 208.9	26 483.8	482.8	983.8	11 587.5
PORTION IN NEW JERSEY . . . . .	2 397	837	111.2	1 054.6	67.7	128.2	515.4	1 658.8	1 849.6	3 492.5	96.3	107.2	1 469.4
POUGHKEEPSIE . . . . .	228	83	22.0	255.6	11.0	21.7	93.1	444.3	615.1	1 149.3	33.5	26.3	281.8
ROCHESTER . . . . .	1 292	454	143.1	1 632.8	84.2	167.6	808.5	4 423.0	1 766.5	6 184.7	198.1	150.5	2 980.2
SYRACUSE . . . . .	726	287	58.9	580.2	37.9	76.0	328.9	1 183.4	1 191.8	2 346.4	76.1	68.2	941.1
UTICA-ROME . . . . .	429	164	34.6	304.3	23.7	45.5	176.0	636.2	612.5	1 257.7	28.2	42.8	627.9
COUNTIES													
ALBANY . . . . .	273	112	20.7	193.2	13.9	27.7	115.4	370.9	316.2	686.3	15.8	23.7	309.1
ALLEGANY . . . . .	47	14	3.6	32.9	2.2	4.6	19.6	62.1	85.4	144.7	3.9	3.6	43.0
BRONX . . . . .	1 366	520	40.9	312.1	31.5	59.7	205.0	557.1	504.5	1 057.2	27.4	52.7	570.7
BROOME . . . . .	257	109	28.9	289.9	16.1	31.9	130.5	560.9	754.9	1 390.3	(0)	37.1	467.0
CATTARAUGUS . . . . .	124	55	8.7	68.8	6.3	12.3	42.9	137.7	118.0	253.2	10.6	10.6	130.7
CAYUGA . . . . .	93	30	6.3	50.8	4.6	9.1	32.3	110.5	86.6	198.9	3.5	7.6	79.0
CHAUTAUQUA . . . . .	250	107	16.9	146.3	12.5	25.0	101.1	265.6	259.6	519.2	11.7	20.3	230.3
CHEMUNG . . . . .	127	55	13.9	129.1	9.7	19.4	77.4	218.4	232.7	445.3	15.2	17.7	226.0
CHENANGO . . . . .	64	28	5.4	43.1	3.6	7.0	24.3	114.7	69.7	186.0	4.3	6.0	91.2
CLINTON . . . . .	57	18	2.9	25.5	2.2	4.4	17.6	135.2	91.3	227.1	6.3	2.9	90.4
COLUMBIA . . . . .	77	33	3.1	25.1	2.4	4.8	17.2	52.0	42.0	93.0	2.5	3.2	35.2
CORTLAND . . . . .	73	31	6.8	48.8	5.1	10.0	32.7	95.5	113.8	209.1	4.9	7.3	77.3
DELAWARE . . . . .	77	26	5.7	46.6	4.1	8.7	29.7	86.2	79.7	167.7	6.1	6.9	74.9
DUTCHESS . . . . .	228	88	22.0	255.6	11.0	21.7	93.1	444.3	615.1	1 149.3	33.5	26.3	281.8
ERIE . . . . .	1 312	508	111.7	1 192.6	82.9	166.4	824.2	2 235.3	2 535.9	4 741.7	130.1	134.1	1 896.5
ESSEX . . . . .	57	8	1.5	15.4	1.2	2.9	11.7	30.5	42.2	71.8	1.6	1.8	23.7
FRANKLIN . . . . .	56	18	1.6	8.9	1.4	2.4	6.6	16.2	16.7	33.3	2.5	1.7	11.9
FULTON . . . . .	186	71	6.6	40.4	5.1	9.7	30.2	78.5	105.7	181.3	4.8	7.5	62.2
GENESEE . . . . .	90	43	7.5	71.3	5.4	11.0	45.0	124.4	152.5	284.2	6.8	7.6	97.1
GREENE . . . . .	51	15	1.6	12.9	1.3	2.6	9.4	28.3	25.7	53.1	2.0	1.7	20.5
HERKIMER . . . . .	98	42	11.3	95.4	7.9	15.3	55.1	195.4	130.4	322.5	10.8	12.4	239.0
JEFFERSON . . . . .	94	33	5.9	47.5	4.7	9.1	34.8	99.4	122.3	222.9	5.0	6.6	77.7
KINGS . . . . .	5 045	1 971	162.9	1 202.3	129.4	247.2	814.0	2 509.5	2 253.9	4 756.2	93.9	220.3	2 190.7
LEWIS . . . . .	42	16	2.3	18.4	1.7	3.5	11.9	34.5	81.5	115.5	2.0	1.8	20.3
LIVINGSTON . . . . .	60	28	4.6	37.5	3.2	6.4	24.6	115.4	65.5	153.0	4.8	3.9	69.3
MADISON . . . . .	62	23	1.8	14.8	1.2	2.4	7.6	25.1	39.6	64.2	1.7	1.7	13.0
MONROE . . . . .	949	321	124.7	1 486.5	70.2	139.4	708.9	4 033.8	1 462.6	5 524.7	167.1	132.8	2 709.0
NASSAU . . . . .	2 509	675	97.3	1 009.7	57.2	111.8	473.3	1 643.3	1 402.2	2 921.5	67.2	116.0	1 639.8
NEW YORK . . . . .	14 932	4 352	450.0	4 405.0	231.2	423.4	1 528.9	6 467.3	7 003.2	13 377.7	198.0	482.3	5 666.8
NIAGARA . . . . .	290	130	31.7	325.1	23.6	46.3	223.9	890.7	713.7	1 602.6	94.4	42.0	756.9
ONEIDA . . . . .	331	122	23.3	208.9	15.8	30.2	120.9	440.8	482.1	935.2	17.4	30.4	388.9
ONONDAGA . . . . .	575	222	50.5	508.2	31.7	63.6	280.3	1 023.5	833.7	1 834.3	64.2	59.1	792.8
ONTARIO . . . . .	114	48	4.3	34.5	3.2	6.5	23.2	74.9	73.1	148.7	6.1	4.9	65.2
ORANGE . . . . .	351	166	16.6	118.4	12.1	22.4	75.6	230.9	219.9	440.2	15.5	16.8	168.3
ORLEANS . . . . .	43	16	2.7	19.4	2.4	4.5	15.2	96.3	56.2	150.2	10.4	1.9	47.3
OSWEGO . . . . .	89	42	6.6	57.2	5.0	10.0	41.0	134.8	318.5	447.9	10.2	7.4	135.3
OTSEGO . . . . .	59	18	1.4	9.1	1.1	2.1	6.3	19.0	20.5	40.1	1.2	1.2	12.3
PUTNAM . . . . .	37	12	.7	8.0	.6	1.2	4.8	12.4	6.6	21.3	.6	1.2	13.7
QUEENS . . . . .	2 739	1 055	112.2	951.4	83.6	162.7	584.2	1 888.0	1 748.9	3 636.5	86.2	132.3	1 680.7
RENSSELAER . . . . .	121	45	8.6	81.9	5.8	11.8	41.3	166.1	140.0	303.8	9.8	8.9	120.6
RICHMOND . . . . .	142	54	5.9	59.6	4.6	8.8	41.4	166.6	269.4	435.9	12.5	7.7	136.7
ROCKLAND . . . . .	238	92	13.8	128.9	9.3	17.7	71.5	519.6	246.9	754.9	14.4	14.0	371.9
ST. LAWRENCE . . . . .	98	39	7.6	79.2	5.9	12.4	58.4	129.5	311.7	447.0	25.5	8.2	143.7
SARATOGA . . . . .	105	37	5.8	55.0	3.7	8.1	30.9	125.0	101.9	223.7	13.9	7.3	105.9
SCHOHARIE . . . . .	29	11	.7	5.2	.6	1.2	4.0	9.3	8.7	17.4	.7	.7	13.5
SCHUYLER . . . . .	14	5	1.2	9.3	.8	1.6	6.0	21.4	15.8	36.8	4.2	1.1	17.4
SENECA . . . . .	31	11	3.9	35.2	2.4	5.0	18.7	76.5	68.2	144.9	3.6	4.1	66.1
STEBBENS . . . . .	87	40	10.7	106.2	6.3	13.0	51.5	200.7	133.5	334.8	13.4	14.4	181.7
SUFFOLK . . . . .	1 632	523	55.9	498.5	41.0	76.3	298.4	898.2	676.8	1 560.1	45.8	48.8	589.9
SULLIVAN . . . . .	70	11	1.0	7.8	.8	1.6	5.5	15.3	19.3	34.3	.7	.8	10.0
TIOGA . . . . .	42	17	5.3	73.9	3.3	6.7	34.7	97.2	74.4	159.5	(0)	6.3	45.2
TOMPKINS . . . . .	49	17	4.8	39.1	3.8	7.4	27.4	74.7	31.1	104.3	1.6	6.1	67.1
ULSTER . . . . .	210	70	12.4	138.8	6.2	11.9	46.6	186.3	440.5	642.3	17.1	14.8	168.4
WARREN . . . . .	82	24	4.6	40.7	3.5	7.0	27.7	78.6	79.2	159.0	20.8	5.0	61.9
WASHINGTON . . . . .	82	29	5.6	50.4	4.4	8.8	34.4	116.1	106.2	221.1	12.0	6.3	85.9
WAYNE . . . . .	126	41	6.8	54.9	5.2	10.8	36.6	102.6	109.1	208.1	9.7	7.0	89.4
WESTCHESTER . . . . .	1 353	462	63.6	719.1	32.5	62.1	240.3	1 282.0	1 175.5	2 444.1	49.8	73.3	950.3
WYOMING . . . . .	47	18	3.6	24.0	3.1	6.5	19.5	32.6	35.5	65.1	4.0	3.4	41.8
YATES . . . . .	20	11	1.0	6.6	.8	1.5	4.9	13.3	16.4	29.6	1.4	1.0	8.5

D. Withheld to avoid disclosing figures for individual companies.

<sup>1</sup>Some counties were withheld from publication in order to avoid disclosing figures for individual companies or to permit further checking of the figures for smaller counties. Additional detail will appear in the final report for this State.<sup>2</sup>Includes employment and payroll at central administrative offices and auxiliary units. For a definition of these units, see appendix.<sup>3</sup>The total cost of materials and value of shipments may include extensive duplication arising from shipments between establishments in the same industry classification. (For a more complete explanation, see appendix.)<sup>4</sup>The standard metropolitan statistical areas in this State are defined as follows:

ALBANY-SCHENECTADY-TROY SMSA: Consists of Albany, Montgomery, Rensselaer, Saratoga, and Schoharie Counties, NY.

BINGHAMTON, NY-PA: Consists of Broome and Tioga Counties, NY, and Susquehanna County, PA.

BUFFALO SMSA: Consists of Erie and Niagara Counties, NY.

ELMIRA SMSA: Coextensive with Chemung County, NY.

NASSAU-SUFFOLK SMSA: Consists of Nassau and Suffolk Counties, NY.

NEW YORK, NY-NJ: SMSA: Consists of Bronx, Kings, New York, Putnam, Queens, Richmond, Rockland, and Westchester Counties, NY, and Bergen County, NJ.

POUGHKEEPSIE SMSA: Coextensive with Dutchess County, NY.

ROCHESTER SMSA: Consists of Livingston, Monroe, Ontario, Orleans, and Wayne Counties, NY.

SYRACUSE SMSA: Consists of Madison, Onondaga, and Oswego Counties, NY.

UTICA-ROME SMSA: Consists of Herkimer and Oneida Counties, NY.

New York, NY-Northeastern New Jersey Standard Consolidated Area will be published in the New Jersey State report.



TABLE 3. General Statistics for the State, by Industry Groups and Industries: 1972 and 1967

(See appendix, Explanation of Terms)

Code	Industry	1972											1967	
		Establishments		All employees		Production workers			Value added by manufacture	Cost of materials¹	Value of shipments¹	Capital expenditures, new	All employees	Value added by manufacture
		Total	With 20 employees or more	Number	Payroll	Number	Man hours	Wages						
		(number)	(number)	(1,000)	(million dollars)	(1,000)	(million)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(1,000)	(million dollars)
	All industries, total².....	38,187	12,900	1,691.4	16,216.4	1,076.5	2,078.0	8,196.4	30,774.6	28,043.5	58,596.4	1,495.0	1,929.2	25,246.7
20	Food and kindred products.....	2,039	766	92.0	832.0	61.9	122.3	489.6	2,337.3	3,788.1	6,113.1	135.4	112.6	1,957.2
201	Meat products.....	244	97	9.7	93.5	8.1	15.5	65.1	175.7	584.7	757.6	10.8	10.7	154.1
2011	Meatpacking plants.....	83	22	2.9	28.4	2.4	4.5	19.2	51.9	217.0	269.2	2.5	3.1	52.0
2013	Sausages and other prepared meats..	41	63	5.6	57.0	4.3	8.7	39.1	102.7	329.4	428.2	7.7	6.7	95.1
202	Dairy products.....	381	154	12.9	114.5	7.2	15.0	62.4	278.1	837.6	1,106.3	20.9	16.3	251.1
2023	Condensed and evaporated milk.....	26	11	.7	5.3	.5	1.0	4.0	15.9	69.8	85.7	D	.8	19.6
2024	Ice cream and frozen desserts.....	56	24	2.4	23.3	1.4	2.6	13.0	61.9	73.7	135.9	2.7	3.0	51.0
2026	Fluid milk.....	253	101	8.5	76.2	4.2	9.0	39.0	177.4	569.3	737.5	14.3	11.2	163.0
203	Preserved fruits and vegetables..	210	100	12.8	90.6	10.4	21.1	67.3	355.7	443.9	900.7	19.8	NA	NA
2032	Canned specialties.....	15	7	1.4	10.5	1.2	2.3	8.3	79.5	74.1	153.6	7.7	2.1	57.2
2033	Canned fruits and vegetables.....	87	46	4.7	31.3	4.0	8.6	24.8	79.2	172.1	253.3	4.8	6.7	98.7
2035	Pickles, sauces, and salad dressings	50	17	1.7	14.1	1.2	2.4	9.2	50.5	62.1	113.1	.9	1.5	31.2
2038	Frozen specialties.....	35	17	2.5	18.7	2.0	3.8	12.7	59.2	68.3	127.6	2.3	NA	NA
204	Grain mill products.....	104	32	4.5	45.0	3.4	7.3	32.7	162.6	383.9	546.0	6.2	5.1	140.2
2041	Flour and other grain mill products	20	8	.9	10.6	.7	1.5	8.1	30.1	153.5	184.4	1.8	1.4	39.6
2045	Blended and prepared flour.....	9	5	.1	5.4	.3	.7	3.6	16.6	26.3	42.1	.4	BB	(D)
205	Bakery products.....	436	146	18.0	162.0	10.8	21.1	86.6	294.5	248.7	548.6	8.0	23.3	285.2
2051	Bread, cake, and related products..	399	131	16.7	151.3	9.9	19.4	80.9	272.3	229.9	507.7	7.4	21.9	267.4
2052	Cookies and crackers.....	37	15	1.3	10.7	.9	1.7	5.7	22.2	18.8	40.9	.6	1.4	17.8
206	Sugar and confectionery products..	103	38	8.9	71.2	7.1	13.5	50.3	258.8	361.7	620.7	14.4	NA	NA
2065	Confectionery products.....	88	29	3.9	26.5	3.2	6.1	19.1	72.1	57.3	131.2	3.5	7.7	87.1
207	Fats and oils.....	26	9	.7	8.5	.5	1.1	5.7	28.7	65.0	94.9	2.1	NA	NA
2077	Animal and marine fats and oils....	20	■	.5	4.8	.3	.7	3.3	11.2	13.1	24.4	1.7	.6	12.2
208	Beverages.....	246	108	16.7	184.9	9.0	16.8	83.3	596.9	588.8	1,182.6	37.1	18.5	409.7
2082	Malt beverages.....	14	10	6.3	85.2	3.6	6.4	40.3	260.2	146.0	406.2	8.3	7.5	160.3
2084	Wines, brandy, and brandy spirits..	22	■	1.6	17.6	1.0	2.1	7.9	65.1	61.5	125.8	D	1.4	38.2
2086	Bottled and canned soft drinks.....	159	74	7.4	67.3	3.6	6.5	26.7	182.5	269.4	449.1	19.0	7.5	123.9
2087	Flavoring extracts and sirups, n.e.c.	45	11	1.1	12.2	.7	1.5	6.3	76.4	94.9	172.0	3.2	1.9	79.8
209	Misc. foods and kindred products..	289	82	7.8	61.8	5.4	10.9	36.2	186.3	273.8	455.7	16.1	NA	(NA)
2091	Canned and cured seafoods.....	14	5	.6	6.3	.4	.8	3.0	10.5	26.7	37.1	D	CC	D
2092	Fresh or frozen packaged fish.....	16	■	.5	3.1	.4	.8	2.3	6.0	21.2	27.2	.2	.4	4.9
2095	Roasted coffee.....	24	12	.7	6.9	.3	.7	2.8	30.7	63.2	94.3	.7	1.7	35.1
2097	Manufactured ice.....	28	4	.3	2.1	.2	.5	1.5	3.6	1.0	4.6	.3	■	D
2098	Macaroni and spaghetti.....	34	14	1.4	11.1	1.0	2.1	6.8	23.1	39.3	62.1	D	EE	D
2099	Food preparations, n.e.c.....	173	41	4.4	32.4	3.0	6.0	19.9	112.3	122.4	230.3	9.1	4.3	76.5
22	Textile mill products.....	1,404	705	55.8	405.9	46.3	91.3	284.6	785.9	1,013.1	1,783.5	60.2	55.6	559.4
2221	Weaving mills, synthetics.....	24	13	1.3	8.9	1.0	2.0	6.6	15.8	17.5	33.5	.8	1.6	15.1
2231	Weaving and finishing mills, wool..	28	11	1.3	12.0	.9	1.8	6.2	21.2	9.8	30.5	1.8	3.2	36.6
2241	Narrow fabric mills.....	48	13	1.9	16.6	1.1	2.4	7.3	20.3	22.0	42.2	(D)	1.7	18.7
225	Knitting mills.....	866	481	36.3	254.8	30.9	60.5	186.3	523.7	750.0	1,256.0	42.5	32.9	327.2
2253	Knit outerwear mills.....	489	284	20.9	132.1	18.5	34.7	101.7	243.5	259.8	499.4	14.0	22.5	203.6
2261	Finishing plants, cotton.....	38	20	1.6	13.5	1.3	2.8	10.6	25.5	17.7	43.0	.6	1.8	15.7
2262	Finishing plants, synthetics.....	46	27	2.4	16.6	2.2	4.4	13.7	27.0	15.4	42.4	2.2	2.1	22.2
2281	Yarn mills, except wool.....	17	6	.5	2.6	.5	.9	2.2	3.7	5.4	9.0	.3	(NA)	(NA)
229	Miscellaneous textile goods.....	208	77	7.5	58.4	5.8	11.3	36.5	107.0	122.2	231.8	8.1	7.8	84.7
2291	Felt goods, exc. woven felts, hats.	5	4	1.0	9.2	.6	1.3	5.1	17.4	8.5	26.1	.4	BB	(D)
2292	Lace goods.....	25	6	.6	3.2	.5	10.0	2.7	6.2	5.6	11.6	1.1	CC	D
2293	Paddings and upholstery filling....	18	■	.5	3.5	.4	.8	2.4	6.1	9.1	15.2	.2	BB	D
2294	Processed textile waste.....	10	4	.3	1.9	.2	.5	1.2	3.5	5.1	8.6	.1	.6	6.3
2295	Coated fabrics, not rubberized.....	33	21	1.9	16.4	1.3	2.5	9.7	33.4	35.9	66.8	1.3	2.4	35.2
2298	Cordage and twine.....	19	10	1.5	11.1	1.1	2.2	7.0	13.3	13.5	31.5	.3	1.4	12.4
23	Apparel, other textile products	8,516	3,644	249.7	1,531.2	208.3	373.0	1,052.8	3,160.3	4,342.1	7,463.9	66.5	290.5	2,878.7
2311	Men's and boys' suits and coats....	261	137	23.5	157.2	20.4	36.3	124.2	284.3	240.5	532.1	4.5	30.3	264.2
232	Men's and boys' furnishings.....	583	259	21.1	127.5	17.5	32.0	80.5	302.7	495.7	790.8	6.6	21.6	237.0
2321	Men's and boys' shirts and nightwear	155	73	7.7	44.0	6.4	12.0	28.5	117.7	228.7	341.3	2.7	7.7	102.4
2327	Men's and boys' separate trousers..	126	46	3.0	17.2	2.5	4.5	11.4	46.9	72.4	118.6	.9	4.3	47.7
2328	Men's and boys' work clothing.....	35	16	.8	6.0	.6	1.1	2.9	11.9	40.2	53.4	.3	.8	9.7
233	Women's, and misses' outerwear...	3,786	2,026	116.0	707.3	96.9	171.1	489.5	1,435.8	2,043.1	3,469.3	26.6	126.5	1,320.0
2331	Women's, misses' blouses, waists...	303	177	10.7	71.2	8.6	15.0	42.9	164.1	341.5	507.7	2.0	10.0	120.8
2335	Women's and misses' dresses.....	2,263	1,191	64.1	370.9	54.5	93.4	265.2	711.6	908.0	1,618.2	9.9	71.7	714.1
2337	Women's and misses, suits and coats	790	418	25.5	170.5	20.9	39.0	117.1	358.4	505.2	854.1	7.9	32.3	364.1
2339	Women's, misses' outerwear, n.e.c..	430	240	15.7	94.7	12.9	23.7	64.3	201.7	288.4	483.9	6.8	12.4	121.1
234	Women's, children's undergarments	428	221	17.9	106.3	14.3	25.2	63.6	249.9	372.6	619.9	4.8	25.0	230.4
2341	Women's and children's underwear...	316	147	10.4	60.4	8.6	15.4	36.9	146.8	239.3	381.7	3.4	15.1	131.4
2342	Brassieres and allied garments.....	112	74	7.5	45.9	5.7	9.8	26.7	103.1	133.3	238.2	1.4	10.0	99.0

See footnotes at end of table.

TABLE 3. General Statistics for the State, by Industry Groups and Industries: 1972 and 1967—Continued

(See appendix, Explanation of Terms)

Code	Industry	1972											1967	
		Establishments		All employees		Production workers			Value added by manufacture	Cost of materials <sup>1</sup>	Value of shipments <sup>1</sup>	Capital expenditures, new	All employees	Value added by manufacture
		Total	With 20 employees or more	Number	Payroll	Number	Man-hours	Wages						
		(number)	(number)	(1,000)	(million dollars)	(1,000)	(million)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(1,000)	(million dollars)
235	Hats, caps, and millinery.....	269	62	3.7	20.4	3.2	5.7	15.8	37.8	28.1	65.7	.5	7.9	63.0
2352	Hats and caps, except millinery...	112	31	1.7	9.0	1.6	2.9	7.1	15.4	11.6	26.8	.4	2.6	17.7
236	Children's outerwear.....	398	223	15.1	87.5	12.6	22.9	58.7	195.2	276.4	467.0	4.4	18.5	179.7
2361	Children's dresses and blouses....	166	101	6.3	37.3	5.3	9.6	25.6	81.9	121.1	199.8	3.1	7.9	81.0
2363	Children's coats and suits.....	73	34	2.8	17.4	2.3	4.2	11.4	30.0	53.2	82.7	.2	3.4	36.0
2369	Children's outerwear, n.e.c.....	159	88	6.0	32.8	5.0	9.1	21.7	83.3	102.1	184.5	1.1	7.2	62.7
2371	Fur goods.....	702	37	3.9	36.3	3.2	5.5	27.3	75.8	123.6	198.1	1.0	7.8	108.6
238	Misc. apparel and accessories...	598	274	18.0	109.6	15.0	26.9	74.1	224.9	301.3	520.4	6.8	19.4	174.3
2381	Fabric dress and work gloves.....	26	7	.3	1.7	.3	.5	.9	3.6	4.7	8.2	(D)	1.1	6.3
2384	Robes and dressing gowns.....	104	54	4.2	25.1	3.3	5.4	16.4	53.1	97.5	149.1	.9	4.0	42.3
2385	Waterproof outer garments.....	121	68	3.6	23.4	3.0	5.3	16.0	46.5	59.0	104.8	1.0	5.5	51.4
2386	Leather and sheep lined clothing..	96	44	2.5	15.9	2.2	4.2	11.9	32.5	48.1	79.4	1.5	2.1	18.9
2387	Apparel belts.....	170	74	5.1	31.8	4.4	8.1	21.1	64.8	65.0	127.9	2.5	4.3	34.1
2389	Apparel and accessories, n.e.c....	81	27	2.3	11.7	1.9	3.5	7.9	24.4	27.0	51.0	(D)	2.4	21.2
239	Misc. fabricated textile prod...	1,491	405	30.5	179.1	25.2	47.4	119.1	353.9	460.8	806.0	11.3	33.6	301.4
2391	Curtains and draperies.....	206	49	3.6	21.9	3.0	5.9	13.9	40.9	81.4	124.0	1.5	4.3	48.6
2392	House furnishings, n.e.c.....	317	101	8.2	48.6	6.6	12.8	29.6	109.6	181.0	284.5	4.0	8.7	85.3
2393	Textile bags.....	31	9	.9	4.5	.7	1.4	3.4	7.7	9.6	17.4	.3	.7	6.2
2394	Canvas and related products.....	90	17	1.4	7.8	1.1	2.0	5.4	14.0	12.0	25.6	.2	1.7	14.2
2395	Pleating and stitching.....	345	84	6.2	34.2	5.3	9.9	24.1	65.7	52.9	116.1	(D)	7.1	51.5
2396	Automotive and apparel trimmings..	328	87	5.7	37.9	4.7	8.4	25.9	72.6	73.0	144.7	1.4	7.4	63.1
2397	Schiffli machine embroideries....	31	3	.3	2.2	.2	.5	1.4	4.0	3.7	7.5	(D)	.4	11.0
2399	Fabricated textile prod., n.e.c....	143	51	4.2	22.0	3.6	6.5	15.4	39.4	47.2	86.2	3.3	3.2	27.6
24	Lumber and wood products.....	1,069	228	17.3	123.4	13.9	27.2	87.3	240.9	233.7	453.2	15.8	(NA)	(NA)
2411	Logging camps, logging contractors	99	2	.4	2.6	.4	.8	2.0	4.7	4.6	9.4	.6	.6	4.9
242	Sawmills and planing mills.....	259	46	3.1	20.6	2.7	5.4	16.7	39.6	43.9	82.8	4.5	3.0	25.2
2421	Sawmills and planing mills, general	200	27	1.9	13.2	1.6	3.4	10.7	27.2	34.0	61.2	3.0	2.2	19.3
243	Millwork, plywood, struc. members	315	81	5.9	45.7	4.8	9.2	32.6	81.7	93.0	173.2	3.7	(NA)	(NA)
2431	Millwork.....	166	40	2.8	22.1	2.3	4.1	15.4	42.0	53.7	94.8	2.5	(NA)	(NA)
2434	Wood kitchen cabinets.....	104	26	1.9	15.5	1.6	3.4	11.5	24.4	18.6	42.5	.6	(NA)	(NA)
244	Wood containers.....	79	22	1.5	9.0	1.2	2.2	6.7	14.5	15.4	29.8	1.2	(NA)	(NA)
2411	Nailed wood boxes and shooks.....	41	7	.8	3.9	.6	1.1	3.2	6.0	6.6	12.5	.4	.8	6.9
2448	Wood pallets and skids.....	23	12	.5	3.5	.4	.8	2.5	6.1	6.7	12.8	.8	(NA)	(NA)
245	Wood buildings and mobile homes.	19	14	1.9	16.3	1.1	2.2	8.1	44.1	31.9	56.9	2.0	(NA)	(NA)
2451	Mobile homes.....	5	4	.3	1.8	.2	.5	1.4	2.8	7.3	9.8	(D)	(NA)	(NA)
2452	Prefabricated wood buildings.....	14	10	1.6	14.5	.9	1.7	6.7	41.3	24.6	47.1	(D)	(NA)	(NA)
249	Miscellaneous wood products.....	298	63	4.5	29.2	3.7	7.4	21.2	56.3	44.9	101.1	3.7	(NA)	(NA)
25	Furniture and fixtures.....	1,142	322	28.6	218.0	23.3	45.6	156.4	425.8	322.9	744.6	16.8	33.4	363.0
251	Household furniture.....	575	157	14.4	100.3	12.0	23.0	72.5	204.2	176.7	378.0	7.4	(NA)	(NA)
2515	Mattresses and bedsprings.....	87	27	2.0	15.7	1.4	3.0	9.4	26.1	37.5	63.6	.8	2.0	21.7
2519	Household furniture, n.e.c.....	20	8	.6	3.6	.6	1.0	2.8	13.3	7.5	20.7	.2	.4	7.5
252	Office furniture.....	63	34	4.0	30.7	3.3	6.5	22.7	65.1	35.6	100.1	3.8	5.6	70.0
2521	Wood office furniture.....	32	15	1.2	10.0	1.0	2.0	7.8	18.9	8.6	27.5	(D)	1.2	13.7
2522	Metal office furniture.....	31	19	2.8	20.7	2.3	4.5	14.9	46.2	27.0	72.6	(D)	4.4	56.3
2531	Public building, related furniture	23	6	.8	6.0	.4	1.0	3.3	14.8	9.8	24.0	(D)	.8	12.9
254	Partitions and fixtures.....	299	95	6.9	61.9	5.6	11.1	44.8	107.2	67.2	174.9	2.2	6.7	84.1
2541	Wood partitions and fixtures.....	184	52	3.8	36.5	3.1	6.1	27.6	62.2	35.8	97.7	1.0	3.8	49.5
2542	Metal partitions and fixtures.....	115	43	3.2	25.4	2.5	5.0	17.2	45.0	31.4	77.2	1.2	2.9	34.6
259	Misc. furniture and fixtures....	182	30	2.5	19.1	2.0	4.0	13.1	34.5	33.6	67.6	(D)	2.8	27.9
2591	Drapery hardware, blinds, shades..	107	11	1.1	7.3	.8	1.6	4.9	13.6	16.8	30.1	(D)	1.1	8.6
2599	Furniture and fixtures, n.e.c.....	75	19	1.4	11.8	1.2	2.4	8.3	20.9	16.8	37.5	2.8	1.7	19.3
26	Paper and allied products.....	836	452	51.7	455.1	40.9	84.7	322.4	854.8	926.3	1,772.2	105.3	59.5	752.7
2621	Papermills, except building paper.	55	39	10.1	105.3	8.2	18.6	82.3	198.8	258.4	454.5	64.3	11.5	168.3
264	Misc. converted paper products..	446	198	19.9	163.3	15.4	31.3	108.5	324.8	339.4	661.5	23.6	23.0	298.5
2641	Paper coating and glazing.....	54	22	2.3	21.4	1.8	3.5	12.7	40.9	48.1	90.0	2.1	2.2	27.5
2642	Envelopes.....	41	26	3.0	24.4	2.4	5.0	17.4	43.8	36.8	80.3	3.0	3.0	35.3
2643	Bags, except textile bags.....	99	50	5.1	42.2	3.8	7.9	27.0	79.1	96.8	174.0	9.7	5.7	74.7
2647	Sanitary paper products.....	15	8	.9	8.1	.7	1.6	6.2	35.6	49.5	85.5	1.7	1.1	(D)
2648	Stationery products.....	76	21	1.6	10.9	1.3	2.5	7.7	22.8	19.6	41.9	1.3	(NA)	(NA)
2649	Converted paper products, n.e.c....	71	30	2.6	20.9	2.0	4.1	13.5	43.3	45.5	87.0	3.6	(NA)	(NA)
265	Paperboard containers and boxes.	313	199	19.9	168.5	15.8	31.6	117.9	292.0	285.1	574.1	13.8	22.4	250.9
2651	Folding paperboard boxes.....	79	45	4.7	44.4	3.8	7.7	33.2	81.3	70.5	150.3	4.5	5.9	69.3
2652	Setup paperboard boxes.....	81	53	4.2	28.1	3.5	6.6	19.7	48.0	31.0	78.7	2.1	5.4	46.0
2653	Corrugated and solid fiber boxes..	103	73	7.5	67.8	5.6	11.4	43.4	116.3	132.0	247.6	4.8	6.9	88.6
2654	Sanitary food containers.....	28	17	2.5	20.6	2.1	4.3	16.0	33.5	39.5	72.5	1.5	3.2	36.6
2655	Fiber cans, drums, similar products	22	11	1.0	7.6	.8	1.6	5.6	12.9	12.1	25.0	.9	1.0	10.4

See footnotes at end of table.



TABLE 3. General Statistics for the State, by Industry Groups and Industries: 1972 and 1967—Continued

(See appendix, Explanation of Terms)

Code	Industry	1972											1967	
		Establishments		All employees		Production workers			Value added by manufacture	Cost of materials <sup>1</sup>	Value of shipments <sup>1</sup>	Capital expenditures, new	All employees	Value added by manufacture
		Total	With 20 employees or more	Number	Payroll	Number	Man-hours	Wages						
		(number)	(number)	(1,000)	(million dollars)	(1,000)	(million)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(1,000)	(million dollars)
27	Printing and publishing.....	6,070	1,239	165.8	1,774.7	83.6	154.9	818.4	4,234.5	2,114.8	6,318.7	150.1	188.3	3,349.4
2711	Newspapers.....	491	129	33.3	392.0	17.8	29.9	212.1	689.9	244.0	934.0	28.4	38.0	494.2
2721	Periodicals.....	556	129	27.2	334.6	2.1	4.5	19.7	1,077.3	690.9	1,772.4	30.2	34.0	974.0
273	Books.....	529	164	28.3	284.2	8.8	17.5	75.1	1,051.8	511.6	1,530.0	34.1	28.7	731.3
2731	Book publishing.....	363	107	23.1	236.5	4.6	9.4	40.0	964.1	469.7	1,400.0	27.0	21.4	638.6
2732	Book printing.....	166	57	5.2	47.7	4.2	8.1	35.1	87.7	41.9	130.0	7.1	7.3	92.7
2741	Miscellaneous publishing.....	474	68	8.1	70.5	3.3	5.5	24.1	169.0	40.9	209.4	3.8	7.3	114.9
275	Commercial printing.....	3,045	453	44.0	459.2	32.9	61.6	318.5	826.6	483.3	1,306.2	41.2	(NA)	(NA)
2751	Commercial printing, letterpress...	1,758	163	18.1	168.6	13.9	26.0	119.4	322.1	188.0	508.4	17.9	(NA)	(NA)
2752	Commercial printing, lithographic..	1,171	267	23.4	262.0	17.1	32.0	177.4	453.1	279.0	729.8	21.9	(NA)	(NA)
2753	Engraving and plate printing.....	97	16	1.9	19.4	1.5	2.8	15.5	38.1	8.2	46.5	1.1	(NA)	(NA)
2754	Commercial printing, gravure.....	19	7	.6	9.2	.4	.8	6.2	13.3	8.1	21.5	.3	(NA)	(NA)
2761	Manifold business forms.....	82	39	2.8	27.0	1.8	3.6	17.1	53.5	38.1	91.4	2.0	3.0	46.6
2771	Greeting card publishing.....	59	16	2.1	13.9	1.6	3.1	9.5	42.1	19.1	62.7	1.5	2.9	45.1
278	Blankbooks and bookbinding.....	359	118	9.8	75.0	8.4	16.2	57.1	135.2	48.6	184.2	3.2	12.5	121.9
2782	Blankbooks and looseleaf binders...	103	47	4.6	33.7	3.8	7.3	23.8	65.5	36.3	102.2	1.3	4.5	47.5
2789	Bookbinding and related work.....	256	71	5.2	41.3	4.7	8.9	33.3	69.7	12.3	82.0	1.9	8.0	74.4
279	Printing trade services.....	475	123	10.2	118.3	6.9	13.0	85.2	189.1	38.3	228.4	5.7	(NA)	(NA)
2791	Typesetting.....	337	76	5.5	65.7	4.1	7.8	50.4	104.6	13.4	118.0	2.7	6.3	82.0
2793	Photoengraving.....	72	29	2.8	31.4	1.7	3.3	22.3	49.2	8.7	59.4	1.1	3.7	59.0
2794	Electrotyping and stereotyping.....	17	9	.6	6.0	.4	.6	4.0	10.3	2.9	13.1	.1	1.1	14.4
2795	Lithographic platemaking services..	49	9	1.3	15.2	.7	1.3	8.5	25.0	13.3	37.9	1.9	(NA)	(NA)
28	Chemicals and allied products..	988	301	52.8	527.9	34.1	68.3	295.5	2,003.6	1,231.9	3,216.0	108.2	63.4	1,636.3
281	Industrial inorganic chemicals.....	37	19	5.1	56.1	3.7	7.3	36.8	158.6	123.5	281.0	18.8	(NA)	(NA)
2816	Inorganic pigments.....	6	4	1.3	13.6	.9	1.9	9.5	31.3	40.3	72.5	(D)	1.6	31.8
282	Plastics materials and synthetics	19	13	2.1	22.1	1.2	2.6	10.8	69.1	56.7	124.9	4.0	(NA)	(NA)
2821	Plastics materials and resins.....	13	10	2.0	21.4	1.2	2.5	10.4	67.7	55.5	122.4	3.9	(NA)	(NA)
283	Drugs.....	128	53	16.7	170.1	10.4	20.8	91.6	940.1	290.3	1,223.8	22.9	20.3	690.7
2834	Pharmaceutical preparations.....	100	41	15.5	155.8	9.8	19.3	85.1	903.3	263.3	1,159.5	19.1	19.0	664.7
284	Soaps, cleaners, and toilet goods..	339	79	10.7	97.0	7.0	14.7	56.4	401.5	268.9	667.2	16.4	(NA)	(NA)
2841	Soap and other detergents.....	57	13	2.0	22.3	1.4	3.0	15.1	81.0	64.5	144.7	(D)	2.1	61.4
2842	Polishes and sanitation goods.....	119	22	1.9	15.0	1.3	2.4	7.7	45.4	37.1	82.0	2.0	(NA)	(NA)
2844	Toilet preparations.....	149	37	6.7	57.7	4.7	9.1	32.3	271.6	162.3	431.1	6.4	9.5	271.6
2851	Paints and allied products.....	144	41	4.2	39.9	2.5	5.1	19.8	95.8	115.1	209.8	6.4	3.9	72.3
286	Industrial organic chemicals.....	65	32	9.0	95.7	6.0	11.2	54.9	218.4	226.6	439.0	31.3	(NA)	(NA)
287	Agricultural chemicals.....	38	13	.6	5.0	.4	.9	3.1	13.0	30.4	42.0	1.2	(NA)	(NA)
2875	Fertilizers, mixing only.....	18	8	.3	2.1	.2	.5	1.4	3.7	16.2	19.6	.3	.3	4.2
289	Miscellaneous chemical products..	218	51	4.1	40.6	2.8	5.4	21.5	104.8	117.9	223.3	7.2	(NA)	(NA)
2899	Chemical preparations, nec.....	150	28	2.1	20.6	1.3	2.8	10.1	60.5	69.0	127.6	5.4	(NA)	(NA)
30	Rubber and misc. plastics prod.	858	350	35.9	276.8	28.2	56.1	185.6	553.9	472.3	1,014.3	43.7	(NA)	(NA)
3079	Miscellaneous plastics products....	772	319	28.8	215.5	22.7	45.1	142.9	441.0	350.2	783.7	38.8	(NA)	(NA)
31	Leather and leather products...	822	369	36.9	211.2	32.1	58.3	159.1	373.7	352.3	723.0	8.6	48.2	378.1
3111	Leather tanning and finishing.....	99	27	2.4	17.8	2.1	3.9	13.8	28.4	55.3	82.8	1.3	2.5	25.6
3131	Boot, shoe cut stock, findings.....	32	13	.6	3.5	.5	1.0	2.7	6.4	9.3	15.6	.1	1.3	11.2
314	Footwear, except rubber.....	130	85	13.5	76.0	11.9	21.5	58.7	132.1	101.7	232.7	3.1	16.6	133.0
3144	Women's footwear, except athletic..	68	43	6.7	38.0	5.8	10.5	28.2	66.6	41.7	107.8	1.9	(NA)	(NA)
3149	Footwear, except rubber, nec.....	19	9	1.8	11.1	1.5	3.0	8.3	18.1	11.9	29.5	.3	(NA)	(NA)
3161	Luggage.....	87	40	3.2	17.0	2.6	4.8	13.2	33.2	25.8	59.1	(D)	5.2	43.7
3171	Women's handbags and purses.....	236	122	10.8	59.3	9.7	17.4	45.5	104.3	86.8	189.3	2.2	14.0	101.1
32	Stone, clay, and glass products	968	288	35.7	346.6	26.7	54.2	234.9	722.1	540.2	1,254.7	61.6	40.4	623.7
322	Glass, glassware, pressed or blown	27	14	4.6	45.4	3.9	8.2	36.5	121.8	48.8	166.9	8.0	5.4	116.5
3231	Products of purchased glass, nec...	156	38	4.1	32.4	3.3	6.6	22.5	67.7	49.8	116.3	1.7	3.7	42.0
325	Structural clay products.....	13	6	.7	6.0	.6	1.2	4.5	12.0	4.7	16.2	.4	1.0	10.9
326	Pottery and related products.....	41	14	2.2	19.7	1.7	3.4	13.6	34.5	19.4	53.9	(D)	1.1	44.6
3264	Porcelain electrical supplies.....	8	7	1.6	15.6	1.2	2.4	10.7	29.2	16.0	45.1	(D)	1.8	26.6
327	Concrete, gypsum, plaster products	484	135	10.4	114.6	7.1	14.6	70.7	216.1	223.2	439.3	24.9	9.9	164.3
3271	Concrete block and brick.....	65	14	1.1	10.9	.7	1.5	6.6	24.6	23.5	47.9	2.4	1.1	16.1
3272	Concrete products, nec.....	193	49	3.4	31.3	2.6	5.4	21.4	61.7	39.5	101.3	11.0	2.6	32.4
3273	Ready-mixed concrete.....	213	64	4.5	57.1	2.6	5.0	30.5	101.1	126.5	228.3	9.9	4.8	90.7
3275	Gypsum products.....	13	8	1.4	15.3	1.2	2.7	12.3	28.7	33.7	61.8	1.6	EE	(D)

See footnotes at end of table.

TABLE 3. General Statistics for the State, by Industry Groups and Industries: 1972 and 1967—Continued

(See appendix, Explanation of Terms)

Code	Industry	1972											1967	
		Establishments		All employees		Production workers			Value added by manufacture	Cost of materials¹	Value of shipments¹	Capital expenditures, new	All employees	Value added by manufacture
		Total	With 20 employees or more	Number	Payroll	Number	Man-hours	Wages						
		(number)	(number)	(1,000)	(million dollars)	(1,000)	(million)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(1,000)	(million dollars)
329	Misc. nonmetallic mineral prod...	163	58	10.1	93.0	7.3	14.6	59.9	188.2	141.0	328.7	7.2	(NA)	(NA)
3291	Abrasive products.....	46	18	5.9	56.9	4.1	8.1	34.6	113.0	86.5	199.4	3.3	8.2	122.3
3292	Asbestos products.....	10	4	1.7	14.9	1.4	2.8	11.4	32.7	24.0	56.4	1.3	(NA)	(NA)
3299	Nonmetallic mineral prod., n.e.c...	49	8	.7	5.0	.6	1.0	3.4	9.0	3.3	12.6	.4	1.4	18.2
33	Primary metal industries.....	474	235	57.2	586.3	44.6	88.8	429.0	1,071.9	2,077.5	3,095.6	84.1	72.9	1,063.7
331	Blast furnace, basic steel prod...	54	31	21.2	238.6	16.6	32.3	177.7	410.1	546.5	909.0	25.7	33.6	465.0
3315	Steel wire and related products...	21	6	.4	3.7	.4	.8	2.8	6.9	9.3	16.1	.9	1.1	12.9
332	Iron and steel foundries.....	62	44	6.9	65.4	5.7	11.3	50.8	107.9	67.9	175.4	6.3	8.3	96.5
3321	Gray iron foundries.....	40	26	2.7	24.4	2.3	4.7	19.3	40.6	34.3	74.7	3.5	3.5	39.5
3339	Primary nonferrous metals, n.e.c...	10	4	.6	6.0	.4	.8	3.9	14.8	32.0	46.8	1.3	(NA)	(NA)
3341	Secondary nonferrous metals.....	46	16	2.2	23.4	1.7	3.1	14.8	58.3	286.9	344.2	4.2	1.6	25.3
335	Nonferrous rolling and drawing...	78	55	15.8	157.4	12.0	24.8	110.5	286.5	962.3	1,246.7	24.9	17.6	303.9
3351	Copper rolling and drawing.....	14	7	3.0	29.0	2.4	4.9	22.5	64.7	228.2	293.0	1.5	3.6	59.9
3356	Nonferrous rolling, drawing, n.e.c.	16	12	1.2	11.6	.8	1.6	6.5	25.2	137.3	160.9	.6	EE	(D)
3357	Nonferrous wire drawing, insulating	34	27	8.8	85.3	6.6	13.7	58.8	156.6	364.3	521.0	12.6	9.9	170.6
336	Nonferrous foundries.....	143	59	7.1	62.3	5.8	11.7	47.7	104.4	80.2	183.8	7.3	7.0	76.7
3361	Aluminum foundries.....	52	20	3.5	35.1	2.9	5.8	27.8	56.6	46.4	103.0	4.8	3.8	43.8
3362	Brass, bronze, and copper foundries	35	11	.7	6.1	.6	1.3	4.4	9.1	8.7	17.9	.4	1.4	14.5
3369	Nonferrous foundries, n.e.c.....	56	28	2.9	21.1	2.4	4.7	15.5	38.7	25.1	62.9	2.1	1.8	18.3
3399	Primary metal products, n.e.c.....	9	5	.3	3.0	.2	.4	1.9	5.9	2.6	8.6	.3	(NA)	(NA)
34	Fabricated metal products.....	2,600	859	97.2	902.3	74.6	149.3	622.8	1,673.3	1,244.8	2,867.1	78.1	(NA)	(NA)
341	Metal cans and shipping containers.	36	20	2.8	28.7	2.4	5.1	23.7	62.6	91.0	151.3	2.3	(NA)	(NA)
342	Cutlery, handtools and hardware..	205	92	13.9	119.9	11.0	22.6	86.0	242.6	152.6	385.4	9.5	13.7	165.0
3421	Cutlery.....	20	15	1.8	12.9	1.6	3.2	10.0	22.6	13.8	35.9	1.0	1.5	15.8
3423	Hand and edge tools, n.e.c.....	56	23	4.5	39.7	3.6	7.3	29.9	70.6	41.1	108.3	2.4	4.8	59.9
3425	Handsaws and sawblades.....	13	8	1.0	6.8	.8	1.4	5.0	15.1	11.6	26.2	.3	.6	4.7
3429	Hardware, n.e.c.....	116	45	6.6	60.5	5.0	10.7	41.1	134.3	86.1	215.0	5.8	6.8	84.5
343	Plumbing, heating, exc. electric.	73	27	4.0	34.5	2.9	5.7	23.5	73.2	64.3	133.9	(D)	(NA)	(NA)
3431	Metal sanitary ware.....	9	5	.6	5.0	.4	.8	3.3	8.4	9.4	17.5	(D)	III	(D)
3432	Plumbing fittings and brass goods..	23	7	.6	4.6	.5	.8	3.1	10.4	13.0	22.4	.9	.7	7.2
344	Fabricated structural metal prod...	807	266	25.6	241.6	18.6	36.9	156.5	451.2	375.3	813.3	14.6	26.5	322.8
3441	Fabricated structural metal prod...	176	63	5.8	58.9	4.1	7.9	38.5	130.1	125.7	253.1	3.1	6.5	78.1
3443	Fabricated platework (boilers shop)	93	39	5.5	56.4	3.7	7.4	33.8	114.9	78.8	183.7	3.3	4.9	72.6
3444	Sheet metalwork.....	227	70	5.7	55.1	4.4	8.6	39.2	87.1	67.7	154.5	3.2	6.2	75.9
3446	Architectural metalwork.....	152	28	2.2	20.0	1.5	2.9	12.1	32.6	20.7	54.7	1.1	2.0	20.9
345	Screw machine prod., bolts, etc..	179	59	5.6	48.9	4.2	8.1	32.0	80.1	47.8	128.9	3.4	7.0	95.8
3451	Screw machine products.....	137	43	2.9	24.8	2.3	4.3	17.3	29.3	22.2	51.3	.9	3.6	46.0
3452	Bolts, nuts, rivets, and washers...	42	16	2.7	24.1	1.9	3.8	14.7	50.8	25.6	77.6	2.5	3.4	49.8
346	Metal forgings and stampings.....	296	112	16.0	172.0	13.3	27.1	131.1	307.8	239.2	540.3	25.2	(NA)	(NA)
3469	Metal stampings, n.e.c.....	264	92	8.8	76.4	7.1	13.7	52.7	141.8	96.6	235.7	(D)	(NA)	(NA)
347	Metal services, n.e.c.....	487	104	7.1	50.3	5.9	11.8	36.4	84.0	37.0	120.8	3.4	8.4	80.9
3471	Plating and polishing.....	340	81	5.4	36.9	4.5	9.0	27.2	63.3	26.1	89.3	2.5	6.3	61.1
3479	Metal coating and allied services..	147	23	1.7	13.4	1.3	2.8	9.2	20.8	10.9	31.5	.8	2.1	19.8
348	Ordnance and accessories, n.e.c...	19	12	7.5	82.1	5.3	10.7	50.3	129.1	63.0	183.0	(D)	(NA)	(NA)
3484	Small arms.....	8	3	2.4	21.8	2.0	3.9	17.1	53.0	24.7	77.2	(D)	(NA)	(NA)
349	Misc. fabricated metal products..	498	167	14.7	124.3	11.0	21.3	83.3	242.7	174.6	410.2	13.1	(NA)	(NA)
3494	Valves and pipe fittings.....	53	31	4.9	49.1	3.4	7.1	31.6	96.3	59.0	150.5	4.9	4.4	58.7
3495	Wire springs.....	16	8	.7	5.3	.6	1.1	3.4	12.6	4.8	17.1	.2	(NA)	(NA)
3496	Misc. fabricated wire products.....	152	57	3.9	29.7	3.1	5.8	20.5	59.3	39.0	97.7	3.4	(NA)	(NA)
3499	Fabricated metal products, n.e.c...	239	54	3.7	26.6	2.9	5.3	17.9	48.8	40.2	88.4	2.6	(NA)	(NA)
35	Machinery, except electrical...	2,806	636	133.9	1,397.4	88.8	177.4	809.4	2,993.3	2,614.5	5,667.1	160.9	150.0	2,286.0
352	Farm and garden machinery.....	39	11	1.5	13.8	1.1	1.8	7.8	40.4	39.3	77.5	1.5	(NA)	(NA)
353	Construction and related machinery	120	47	8.5	81.6	5.0	9.9	43.9	148.9	113.0	257.0	9.1	FF	(D)
3531	Construction machinery.....	33	9	1.7	16.3	1.1	2.3	10.7	28.5	40.8	68.8	4.5	1.6	26.7
3535	Conveyors and conveying equipment..	27	13	1.4	13.7	.8	1.5	6.7	28.7	14.5	42.1	.8	1.6	22.9
3536	Hoists, cranes, and monorails.....	8	4	.8	7.2	.5	.9	4.0	11.7	7.2	18.9	.2	EE	(D)
354	Metalworking machinery.....	706	140	17.0	177.6	12.5	25.9	117.0	311.8	132.5	443.2	13.0	21.4	315.8
3541	Machine tools, metal cutting types.	66	22	4.6	50.4	3.3	6.6	32.0	80.3	31.3	117.1	3.6	5.6	105.7
3549	Metalworking machinery, n.e.c.....	25	11	1.1	11.7	.7	1.4	6.7	20.9	17.2	37.7	1.0	(NA)	(NA)
355	Special industry machinery.....	344	93	10.9	111.5	6.9	13.6	58.4	205.4	138.7	357.7	7.5	17.9	282.8
3552	Textile machinery.....	52	16	2.0	16.6	1.3	2.5	9.4	30.1	26.4	57.2	1.4	1.1	16.8
3554	Paper industries machinery.....	27	12	1.5	14.9	.9	1.8	7.9	23.6	20.3	47.7	.4	2.7	42.1
3555	Printing trades machinery.....	102	22	1.8	18.0	1.3	2.5	11.7	35.6	15.7	53.2	.5	6.5	112.0
3559	Special industry machinery, n.e.c...	96	22	3.6	40.0	2.0	4.0	17.6	75.6	53.1	133.3	3.5	5.3	79.9
356	General industrial machinery.....	282	98	21.9	211.3	14.2	28.4	122.4	396.3	265.2	655.3	16.6	28.4	381.6
3564	Blowers and fans.....	30	13	3.3	29.6	2.2	4.3	17.6	59.9	40.0	99.0	2.7	3.1	42.1
3565	Industrial patterns.....	56	4	.3	3.2	.3	.5	2.7	5.4	1.4	6.8	.2	.5	7.3
3567	Industrial furnaces and ovens.....	19	6	.5	5.2	.4	.6	3.2	8.2	5.1	13.3	.1	.5	6.9
3569	General industrial machinery, n.e.c.	84	32	3.2	31.0	1.9	3.8	16.1	63.8	43.2	106.2	3.3	4.8	62.0
3573	Electronic computing equipment.....	52	34	19.5	242.7	8.1	14.7	75.6	374.2	829.8	1,276.0	(D)	FF	(D)

See footnotes at end of table.



TABLE 3. General Statistics for the State, by Industry Groups and Industries: 1972 and 1967—Continued

(See appendix, Explanation of Terms)

Code	Industry	1972											1967	
		Establishments		All employees		Production workers			Value added by manufacture	Cost of materials <sup>1</sup>	Value of shipments <sup>1</sup>	Capital expenditures, new	All employees	Value added by manufacture
		Total	With 20 employees or more	Number	Payroll	Number	Man-hours	Wages						
		(number)	(number)	(1,000)	(million dollars)	(1,000)	(million)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(1,000)	(million dollars)	
358	Refrigeration, service machinery.	156	68	19.4	202.6	15.1	29.9	146.7	682.1	539.3	1,211.1	43.6	10.6	195.5
3585	Refrigeration and heating equipment	72	40	17.1	183.8	13.6	26.9	136.0	647.7	508.6	1,146.2	41.7	(NA)	(NA)
3589	Service industry machinery, n.e.c..	58	16	1.1	8.5	.7	1.3	4.4	16.9	14.4	31.2	.9	.9	12.2
359	Misc. machinery, except electric.	1,042	118	14.2	146.7	11.3	23.1	106.1	280.6	122.7	395.6	19.4	(NA)	(NA)
36	Electric, electronic equipment.	1,561	656	156.4	1,572.4	96.4	188.8	754.1	2,797.5	2,369.5	5,269.6	132.8	(NA)	(NA)
361	Electric distributing equipment..	57	29	2.6	20.8	1.9	3.7	14.2	41.8	36.7	77.7	1.7	(NA)	(NA)
362	Electrical industrial apparatus..	118	51	21.6	223.1	15.4	31.6	139.0	443.8	253.4	696.2	13.7	27.1	408.2
3621	Motors and generators.....	33	17	12.1	127.7	9.3	19.9	88.3	251.4	148.0	400.3	5.9	17.1	269.1
3622	Industrial controls.....	42	14	3.5	34.6	2.1	3.8	16.1	69.5	38.6	106.0	1.5	3.5	44.0
3629	Electrical industrial apparatus, nec	23	10	2.7	24.9	2.1	4.2	16.3	52.2	30.1	81.3	2.2	3.5	40.1
3634	Electric housewares and fans.....	42	23	3.7	27.6	2.9	6.1	18.6	64.4	51.6	117.7	1.9	5.2	62.7
364	Elect. lighting and wiring equip.	330	137	20.1	147.9	15.7	27.7	95.8	324.0	245.8	580.6	18.4	21.1	237.7
3641	Electric lamps.....	18	6	.9	5.2	.8	1.2	3.9	12.8	9.9	22.8	1.7	.8	6.8
3643	Current-carrying wiring devices....	44	19	6.8	48.2	5.5	10.5	32.2	94.4	79.1	171.2	8.6	6.8	59.8
3644	Noncurrent-carrying wiring devices.	21	15	4.6	32.3	3.3	4.5	21.0	80.1	38.3	134.0	5.1	4.4	65.1
3645	Residential lighting fixtures.....	178	69	4.5	34.5	3.5	6.6	21.4	73.5	75.2	148.2	1.3	(NA)	(NA)
3648	Lighting equipment, n.e.c.....	27	7	.4	3.6	.4	.6	2.3	6.7	6.9	13.6	.1	(NA)	(NA)
366	Communication equipment.....	252	127	43.4	499.7	21.8	42.0	195.5	777.8	458.5	1,214.8	34.7	72.0	925.2
367	Electronic components and access.	330	161	47.7	516.4	25.8	52.9	210.7	903.7	1,010.1	2,016.8	49.8	57.8	693.5
3691	Storage batteries.....	7	4	.3	3.0	.2	.5	2.2	3.7	8.4	11.8	(D)	.3	2.1
3694	Engine electrical equipment.....	22	16	4.5	35.8	3.6	7.4	24.5	71.7	49.8	122.2	3.4	2.0	26.4
37	Transportation equipment.....	429	169	72.6	878.6	50.5	102.2	542.5	1,625.8	1,659.3	3,172.1	69.6	(NA)	(NA)
371	Motor vehicles and equipment.....	190	75	33.1	393.6	27.5	56.5	315.2	981.0	1,110.5	2,086.0	43.9	FF	(D)
3713	Truck and bus bodies.....	49	24	1.7	13.6	1.3	2.3	9.6	29.5	29.3	56.1	.5	1.0	8.3
372	Aircraft and parts.....	73	33	27.8	379.4	14.2	28.9	158.2	486.2	424.8	804.8	7.5	(NA)	(NA)
3724	Aircraft engines and engine parts..	4	4	.8	7.6	.6	1.1	4.5	15.7	6.1	21.2	.2	(NA)	(NA)
3731	Ship building and repairing.....	39	25	4.3	40.6	3.5	6.6	30.1	58.3	46.1	104.3	(D)	3.1	36.4
376	Guided missiles, space vehicles..	7	5	2.4	26.3	1.1	2.3	9.8	29.3	10.8	40.6	(D)	(NA)	(NA)
38	Instruments and related prod...	837	293	95.3	1,082.1	56.2	110.9	531.8	3,507.9	1,146.5	4,690.0	126.0	(NA)	(NA)
3811	Engineering, scientific instruments	71	29	4.1	44.3	2.5	5.1	23.1	69.2	36.5	111.9	1.4	FF	(D)
382	Measuring and controlling devices	155	69	7.4	67.0	4.1	8.0	29.5	130.0	59.8	194.0	4.5	(NA)	(NA)
3823	Process control instruments.....	17	12	2.7	25.8	1.3	2.5	10.1	57.9	18.7	71.9	1.5	(NA)	(NA)
3825	Instruments to measure electricity.	58	24	2.1	18.7	1.3	2.5	9.2	36.3	19.0	54.2	1.9	(NA)	(NA)
3829	Measuring, controlling devices, nec.	71	26	2.0	17.6	1.2	2.2	8.1	26.1	16.8	52.5	1.0	(NA)	(NA)
384	Medical instruments and supplies.	243	72	10.4	93.4	6.9	13.9	49.5	201.7	109.4	303.9	8.7	9.5	122.8
3841	Surgical and medical instruments...	69	30	4.8	41.1	3.4	7.0	24.2	95.4	43.8	136.7	4.6	2.8	36.6
3842	Surgical appliances and supplies...	102	25	3.5	30.3	2.2	4.2	14.3	55.6	29.0	85.1	1.9	FF	(D)
3843	Dental equipment and supplies.....	72	17	2.2	22.0	1.3	2.6	11.0	50.7	36.6	82.1	2.2	FF	(D)
3851	Ophthalmic goods.....	100	31	8.6	65.2	6.7	13.2	44.6	115.9	48.2	158.9	3.6	9.1	85.9
3873	Watches, clocks, and watchcases....	70	35	5.7	53.2	3.9	7.7	29.4	92.1	141.4	233.4	2.8	(NA)	(NA)
39	Misc. manufacturing industries.	3,485	856	77.8	558.7	60.3	113.0	356.2	1,162.8	1,271.9	2,402.8	44.9	89.7	943.8
391	Jewelry, silverware, plated ware.	1,018	180	17.1	146.6	12.7	23.9	90.4	306.6	521.4	812.4	8.6	15.9	218.8
3911	Jewelry, precious metal.....	722	140	11.3	101.3	7.8	14.5	57.0	210.8	344.1	541.9	3.3	10.2	139.0
3914	Silverware and plated ware.....	44	15	3.6	29.2	3.1	6.0	23.9	54.7	43.7	98.3	(D)	3.8	46.7
3915	Jewelers' materials, lapidary work.	252	25	2.2	16.2	1.8	3.5	9.6	41.1	133.7	172.1	(D)	(NA)	(NA)
3931	Musical instruments.....	37	12	1.1	7.2	1.0	1.9	5.9	10.4	8.2	20.3	.3	2.1	19.3
394	Toys and sporting goods.....	393	164	20.9	132.8	16.6	31.1	86.7	315.8	307.8	605.5	15.6	21.4	204.8
3942	Dolls.....	139	62	5.4	28.4	4.5	8.6	20.5	49.5	53.2	102.2	.5	FF	(D)
3944	Games, toys, and children's vehicles	130	54	10.3	71.8	8.0	14.7	44.7	174.7	147.0	310.5	11.9	(NA)	(NA)
3949	Sporting and athletic goods, n.e.c.	110	46	5.1	31.5	3.9	7.6	20.8	89.5	104.6	187.7	3.2	FF	(D)
395	Pens, pencils, office, art goods.	148	51	4.0	30.1	2.9	5.5	16.7	63.8	62.1	125.8	1.1	6.2	68.9
396	Costume jewelry and notions.....	590	161	11.7	74.8	9.2	17.4	47.9	149.1	129.9	278.4	6.1	16.9	159.2
3961	Costume jewelry.....	254	62	4.9	30.6	3.8	6.9	18.3	61.7	48.1	109.8	1.5	7.3	66.7
3962	Artificial flowers.....	75	14	1.0	6.1	.9	1.5	4.0	11.1	10.3	21.2	.4	2.0	19.1
3963	Buttons.....	128	38	2.1	14.2	1.6	2.9	9.0	26.3	19.8	46.2	1.4	2.8	28.0
3964	Needles, pins, and fasteners.....	134	48	3.7	23.6	2.9	6.0	16.5	49.6	51.5	100.4	2.8	4.8	45.4
399	Miscellaneous manufactures.....	1,299	286	23.0	167.2	17.9	33.2	108.6	317.1	242.5	560.4	13.2	27.1	272.7
3993	Signs and advertising displays.....	422	97	6.9	57.3	5.4	9.9	36.4	104.7	62.7	166.6	3.2	8.4	91.5
3999	Manufacturing industries, n.e.c....	799	152	12.6	86.2	9.8	18.2	56.5	170.1	138.0	305.2	5.7	15.4	144.0
--	Administrative and auxiliary...	1,343	718	171.9	2,419.2	-	-	-	-	-	-	-	158.0	-

Note: The following symbols indicate employment size range for 1967:

AA less than 250 employees      EE 1,000 to 2,499 employees  
 BB 250 to 499 employees      FF 2,500 employees and over  
 CC 500 to 999 employees

- Represents zero. (NA) Not available. Because of a revision to this industry or industry group in the 1972 edition of the SIC manual, 1967 census data are not available on a comparable basis. (D) Withheld to avoid disclosing figures for individual companies.

<sup>1</sup>The total cost of materials and value of shipments for industry groups shown may include extensive duplication arising from shipments between establishments in the same industry classification. (For a more complete explanation, see appendix.)

<sup>2</sup>Includes figures for industry groups which have been withheld from publication in order to (a) avoid disclosing figures for individual companies or (b) permit further checking of figures for smaller industry groups. Additional detail will appear in the final report for this State.

## Appendix A. SCOPE AND COVERAGE

This report is one of a series presenting preliminary information, by State, from the 1972 Census of Manufactures. The data will be superseded in a final report which, in turn, will be included in *Volume III, Area Statistics, 1972 Census of Manufactures*. The final report will include a comprehensive discussion of the concepts and definitions used in the census.

The census of manufactures covers each manufacturing establishment in the United States with one paid employee or more; manufacturing establishments with no employees are excluded. Firms which operated more than one establishment were required to file a separate report for each location. Companies which engaged in distinctly different lines of activity at one location were asked to submit separate reports if the company records permitted such a separation and the activities were of significant size.

This report includes figures for administrative offices, warehouses, garages, or other auxiliary units which service manufacturing establishments.

In the 1972 census, the approximately 120,000 manufacturing establishments with fewer than 10 employees were excused from filing reports. Under special arrangements which safeguarded the confidentiality of both tax and census records, data on payrolls, sales, and industry classification from the administrative records of the Social Security Administration and the Internal Revenue Service were made available to the Census Bureau for use in the 1972 Economic Censuses (retail and wholesale trade, service industries, construction industries, manufactures, and mineral industries). Estimates for data other than payrolls and sales for these small establishments were constructed from industry averages. The effect on industry aggregates is slight in most industries. For manufacturing as a whole, these small establishments account for less than 3 percent of the payrolls and value added.

Establishments are classified by industry in accordance with industry definitions described in the 1972 edition of the Standard Industrial Classification (SIC) Manual. For 1972, the SIC was significantly revised and the comparability with prior year's data for some industries was significantly affected. The comparability at the 2- and 3-digit SIC levels was less affected. The final volumes of the 1972 Census of Manufactures will contain a table relating aggregates based on the 1972 SIC with aggregates derived from classifying establishments according to the 1967 SIC definitions.

As in earlier censuses, a number of small establishments may have been misclassified as to industry. However, such possible misclassifications have significant effect on *none* of the statistics except the number of establishments. As indicated above, report forms were not mailed to very small establishments (fewer than 10 employees). The industry classifications for these establishments were assigned on the basis of brief descriptions of the general activity of the establishment. Where the description is incomplete or there are relatively fine lines of demarcation among industries or between manufacturing and nonmanufacturing activity, the code assigned to an establishment could differ from that which would have been assigned on the basis of more complete product information. Therefore, the total establishment count for individual industries should be viewed as an approximation rather than a precise measurement. The counts for establishments with 20 employees or more are more reliable than the total number of establishments.

More detailed figures for this State will appear in the final census reports. Final reports will also include a comprehensive discussion of such concepts as "industry" and "establishment," as well as the various statistical items such as "employment," "value of shipments," and "value added." Similar preliminary and final reports will be issued for other States during the coming months. A series of preliminary summary reports showing U.S. totals for each manufacturing industry and for each State are being issued. Final industry reports and final area reports will be published during 1974.

Order forms describing the individual reports and listing their prices may be obtained from any U.S. Department of Commerce district office or from the Publications Distribution Section, Social and Economic Statistics Administration, Washington, D.C. 20233.

The 1972 Census of Manufactures is the 29th census of manufacturing establishments in the United States. For 1972, it was conducted jointly with the censuses of mineral industries, construction industries, retail trade, wholesale trade, and selected services under authority of Title 13 of the United States Code. Title 13 specifies that a census of manufactures be conducted every 5 years and, as amended, to cover years ending in "2" and "7". Title 13 also authorizes an annual sample survey of manufacturing establishments in interim years.



## Appendix B. EXPLANATION OF TERMS

*(For a more complete discussion of these terms and the method of compiling the Census of Manufactures, see the "Introduction" to the 1967 Census of Manufactures, Volume III).*

**All Employees**—All full-time and part-time employees on the payrolls of operating manufacturing establishments for any part of the pay period ending nearest the 12th of the months specified on the report form. Included are all persons on paid sick leave, paid holidays, and paid vacations during these pay periods. Officers of corporations are included as employees; proprietors and partners of unincorporated firms are excluded. The "all employee" number is the average number of production workers for the midmonth payroll period of March, May, August, and November plus the number of nonproduction employees in mid-March.

**Number of Production Workers**—Workers (up through the working foreman level) engaged in fabricating, processing, assembling, inspecting, receiving, packing, warehousing, shipping (but not delivering), and maintenance, repair, janitorial, and watchman services, product development, auxiliary production for plant's own use (e.g., powerplant), recordkeeping, and other closely associated services. Proprietors and partners are excluded.

**Payroll**—This item includes all forms of compensation such as salaries, wages, commissions, dismissal pay, bonuses, vacation and sick leave pay, and compensation in kind, prior to such deductions as employees' Social Security contributions, withholding taxes, group insurance, union dues, and savings bonds. The total includes salaries of officers of these establishments, if a corporation; it excludes payments to the proprietor or partners, if an unincorporated concern. Respondents were told that in reporting they could follow the definition of payrolls used for calculating the Federal withholding tax.

**Man-Hours of Production Workers**—This total relates to production-worker man-hours worked or paid for at the plant including actual overtime hours (not straight-time equivalent hours). It excludes hours paid for vacation, holidays, or sick leave when the employee was not at the plant.

**Cost of Materials**—The term "Cost of Materials" refers to charges actually paid or payable for items consumed or put into production during the year, including freight and other direct charges incurred by the establishment in acquiring these materials. It includes the cost of materials or fuel consumed regardless of

whether these items were purchased by the establishment from other companies, transferred to it from other establishments of the same company, or withdrawn from inventory during the year. The establishment was requested to value materials transferred from other parts of the company at its approximate market value, not at cost of production. The important components of this cost item are (a) all raw materials, semifinished goods, parts, components, containers, scrap, and supplies put into production or used as operating supplies and for repair and maintenance during the year; (b) electric energy purchased; (c) fuels consumed for heat, power, or the generation of electricity; (d) work done by others on materials or parts furnished by manufacturing establishments (contract work); and (e) products bought and resold in the same condition.

**Value of Shipments**—The value of shipments is the received or receivable net selling value, f.o.b. plant (exclusive of freight and taxes), of all products shipped, both primary and secondary, as well as all miscellaneous receipts such as receipts for contract work performed for others, installation and repair, sales of scrap, and sale of products bought and resold without further processing. Included are all items made by the establishment or for it under contract from materials owned by it whether sold, transferred to other plants of the same company, or shipped on consignment. The net selling value of products made in one plant on a contract basis from materials owned by another was reported by the plant providing the materials.

In the case of multiunit companies, the manufacturer was requested to report the value of products transferred to other establishments of the same company at full economic value; i.e., to include not only the direct costs of production but also a reasonable proportion of "all other costs" (including company overhead) and profit.

**Duplication in Cost of Materials and Value of Products**—The aggregate cost of materials and value-of-shipments figures for industry groups and for all manufacturing industries may include large amounts of duplication since the products of some industries are used as materials by others. With some important exceptions, such as motor vehicles and parts, this duplication is not significant within individual industries but arises from the addition of the totals of related industries in successive stages of the production of a finished manufactured product. Examples are the addition of flour mills to bakeries in the food group and the addition of pulp mills to paper mills in the paper and allied products group of industries. Esti-



mates of this duplication indicate that the value of manufactured products exclusive of such duplication—the value of finished manufactures—approximates two-thirds of the total value of products.

Prior to 1962, the Bureau of the Census did not publish figures for cost of materials or value of shipments if they contained significant duplication. Effective with the 1962 annual survey these figures were shown at all industry levels for the United States to meet the requests for their use in studies in which the presence of an indeterminate amount of duplication is not a limiting factor. However, they are appropriately footnoted. Effective with the 1964 annual survey, these industry group totals are also shown at the State, standard metropolitan statistical area, and large-county level.

Even where there is no significant amount of duplication, value-of-shipments figures are deficient as measures of the relative economic importance of individual manufacturing industries or geographic areas because of the wide variation in ratio of materials, labor, and other processing costs to value of shipments among industries.

**Value Added by Manufacture**—This measure of manufacturing activity is derived by subtracting the cost of materials, supplies, containers, fuel, purchased electricity, and cost of resales contract work from the value of shipments for products manufactured plus resales and receipts for services rendered. The result of this calculation is adjusted by the net change in finished goods and work-in-process inventories between the beginning and end of the year. (In the few industries that report value of production rather than value of shipments, only changes in work-in-process inventories are used to adjust value added. In the shipbuilding and repairing industry, no inventory adjustment is made.)

"Value added" avoids the duplication in the value of shipments figure which results from the use of products of some establishments as materials by others. Value added is considered to be the best value measure available for comparing the relative economic importance of manufacturing among industries and geographic areas.

**Expenditures for Plant and Equipment**—Manufacturing establishments in operation and establishments under construction but not yet in operation, were asked to report their expenditures for (a) permanent additions and major alterations to the manufacturing establishment, and (b) new machinery and equipment used for replacement purposes and additions to plant capacity if they are of the type for which depreciation accounts are ordinarily maintained.

These totals exclude expenditures for new facilities and equipment leased from nonmanufacturing concerns; new facilities owned by the Federal Government but operated under contract by private companies; and plant and equipment furnished to the manufacturer by communities and nonprofit organizations. Expenditures for used plant and equipment (although reported in the census), expenditures for land, and cost of maintenance and repairs charged as current operating expense are also omitted from the figures for new capital expenditures.

**Central Administrative Offices and Auxiliary Units**—In the 1972 census as in previous years, respondents were asked to file separate reports for central administrative offices or auxiliary units which were (1) at different locations from the establishments served or, (2) at the same location as one of these establishments but were not operated as an integral part thereof and served two or more establishments. The functions of employees in central administrative offices include general company policy determination, planning and management (that is, company purchasing, accounting, general engineering, direction of company personnel matters, and legal and patent matters). Auxiliaries are storage facilities, garages, repair shops, purchasing offices, sales promotion offices, and research laboratories serving the plants or central management of the company.

**Standard Metropolitan Statistical Areas**—Standard metropolitan statistical areas (SMSA) are integrated economic and social units with a large volume of daily travel and communication between the central city and outlying parts of the area.<sup>1</sup> Each area (except in New England) consists of one whole county or more. An area may contain not only highly industrialized counties but also adjoining counties which, though primarily residential in character, contribute significantly to the industrial counties' labor force and are socially and economically integrated with the central city. These areas are defined by the Federal Committee on Standard Metropolitan Statistical Areas of the Office of Management and Budget for general-purpose use throughout the Federal Government in presenting economic and social data. In the New England States, similar intergration criteria are applied in defining

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<sup>1</sup> Each standard metropolitan statistical area must include either (1) a city with 50,000 or more inhabitants, or (2) a city having a population of at least 25,000 which (a) with the addition of the population of contiguous places has a population density of at least 1,000 persons per square mile; (b) constitutes, for general economic and social purposes, a single community with a combined population of at least 50,000; and (c) includes a total population of at least 75,000 in the county or counties in which the city and contiguous places are located.



SMSA's on a city and town basis because towns rather than counties are regarded as the significant unit in this region of the country.

The requirement that each SMSA consist of county units (except in New England) sometimes results in the inclusion in an area of considerable amount of territory which would not ordinarily be considered "metropolitan," much less "industrial." It is recognized that metropolitan areas could be more accurately defined in terms of smaller area segments such as minor civil

divisions, but the usefulness of areas so defined would be limited by the fact that many types of economic and social data are available only on a county basis.

Each SMSA is designated by the name of the principal city of the area. In addition to the name of the principal city, the area title may include one or two additional city names.

The data for SMSA's which changed definition since the 1967 census have not been retabulated on the new basis for years prior to 1972.

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PRELIMINARY REPORT  
**1972 CENSUS OF  
MANUFACTURES**  
AREA SERIES

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## North Carolina

Value added by manufacturing in 1972 in the State of North Carolina amounted to \$11,023 million, a 12-percent increase from 1971 and a 67-percent increase from 1967.

This report presents preliminary results from the 1972 Census of Manufactures for the State, its Standard Metropolitan Statistical Areas, and its counties.

Data are provided for industry groups within the State. Historical data, back to 1958, are included for the State as a whole,

and 1967 figures on employment and value added are provided for the smaller areas.

The figures in this report have been subjected to only preliminary review and must be regarded as approximations of the final census figures. No adjustments have been made in the value figures for changes in price level.

For an explanation of the terms used in the tables, see the appendix at the end of this report.

TABLE 1. General Statistics for the State: 1972 and Earlier Years

(See appendix, Explanation of Terms)

Year	Establishments		All employees <sup>1</sup>		Production workers			Value added by manufacture	Cost of materials <sup>2</sup>	Value of shipments <sup>2</sup>	Capital expenditures, new
	Total	With 20 employees or more	Number	Payroll	Number	Man-hours	Wages				
	(number)	(number)	(1,000)	(million dollars)	(1,000)	(millions)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(million dollars)
NORTH CAROLINA											
1972 Census .....	8,578	3,784	750.8	5,017.4	604.4	1,214.3	3,436.0	11,023.1	13,314.5	24,161.7	989.4
1971 ASM .....	(NA)	(NA)	699.0	4,267.3	566.3	1,118.8	2,949.5	9,824.2	11,104.2	20,880.5	810.4
1970 ASM .....	(NA)	(NA)	699.9	3,998.6	571.3	1,124.4	2,789.5	9,053.4	10,559.3	19,515.0	714.0
1969 ASM .....	(NA)	(NA)	691.0	3,751.8	568.9	1,133.2	2,670.4	8,186.1	10,047.5	18,155.4	756.2
1968 ASM .....	(NA)	(NA)	669.1	3,424.1	555.6	1,112.0	2,474.2	7,575.0	9,407.7	16,880.6	637.6
1967 Census .....	8,266	3,379	643.8	3,066.1	537.8	1,070.2	2,210.1	6,606.5	8,592.8	15,129.6	664.6
1966 ASM .....	(NA)	(NA)	611.9	2,806.1	511.2	1,047.7	2,022.2	6,133.0	8,200.4	14,146.6	732.5
1965 ASM .....	(NA)	(NA)	576.2	2,503.3	480.6	981.9	1,818.6	5,528.4	7,401.3	12,819.3	511.6
1964 ASM .....	(NA)	(NA)	546.9	2,278.6	454.6	921.3	1,640.1	4,950.4	6,798.0	11,707.2	352.5
1963 Census .....	7,784	2,946	530.6	2,092.1	444.4	890.2	1,527.5	4,566.5	(NA)	(NA)	314.4
1962 ASM .....	(NA)	(NA)	509.9	1,919.9	431.6	860.5	1,427.9	4,248.3	(NA)	(NA)	294.2
1961 ASM .....	(NA)	(NA)	495.3	1,776.4	417.6	816.9	1,306.8	3,894.2	(NA)	(NA)	227.3
1960 ASM .....	(NA)	(NA)	499.6	1,750.2	423.8	827.6	1,293.9	3,804.6	(NA)	(NA)	240.3
1959 ASM .....	(NA)	(NA)	489.8	1,674.8	416.7	825.9	1,259.9	3,577.0	(NA)	(NA)	235.4
1958 Census .....	7,352	2,628	461.5	1,486.7	391.7	747.4	1,109.7	3,077.9	(NA)	(NA)	191.3

Note: "ASM" data are based on a representative sample of manufacturing establishments canvassed in the Annual Survey of Manufactures. These estimates may differ from the results of a complete canvass of all manufacturing establishments. The standard errors associated with these estimates are published in the annual survey of manufactures volumes for this period. For comparative purposes, the 1972 ASM estimate for the State of North Carolina was 747 thousand employees, and \$10,778 million in value added with corresponding standard error of estimate of 1 and 1.

(NA) Not available.

<sup>1</sup>Includes employment and payroll at central administrative offices and auxiliary units. (For a definition of these units, see appendix.)

<sup>2</sup>The total cost of materials and value of shipments may include extensive duplication arising from shipments between establishments in the same industry classification. (For a more complete explanation, see appendix.)

TABLE 2. General Statistics for the State, Standard Metropolitan Statistical Areas, and Counties: 1972 and 1967

(See appendix, Explanation of Terms)

State, standard metropolitan statistical areas, and counties <sup>1</sup>	1972											1967	
	Establishments		All employees <sup>2</sup>		Production workers			Value added by manufacture	Cost of materials <sup>3</sup>	Value of shipments <sup>3</sup>	Capital expenditures, new	All employees	Value added by manufacture
	Total	With 20 employees or more	Number	Payroll	Number	Man-hours	Wages						
	(number)	(number)	(1,000)	(million dollars)	(1,000)	(million)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(1,000)	(million dollars)
NORTH CAROLINA, TOTAL . . . . .	8 578	3 784	750.8	5 017.4	604.4	1 214.3	3 436.0	11 023.1	13 314.5	24 161.7	989.4	643.8	6 606.5
STANDARD METROPOLITAN STATISTICAL AREAS <sup>4</sup>													
ASHEVILLE . . . . .	184	92	22.5	148.4	17.4	34.4	97.7	317.1	302.5	606.9	34.7	19.7	195.5
BURLINGTON . . . . .	221	117	24.6	163.8	19.2	37.9	107.9	294.9	452.7	743.3	32.5	23.2	197.9
CHARLOTTE-GASTONIA . . . . .	1 178	517	87.9	615.3	66.8	140.5	394.9	1 218.7	1 499.0	2 666.8	102.9	77.3	780.0
FAYETTEVILLE . . . . .	107	53	10.6	71.2	8.6	17.5	48.5	197.3	306.2	498.7	23.0	6.5	54.6
GREENSBORO-WINSTON-SALEM-HIGH POINT . . . . .	1 523	686	141.3	1 092.2	102.5	203.5	641.1	2 551.7	2 522.4	5 049.2	148.1	110.9	1 567.0
NORFOLK-VIRGINIA BEACH-PORTSMOUTH . . . . .	385	145	23.6	181.7	17.5	35.9	116.7	445.5	673.3	1 102.7	38.4	24.0	323.9
PORTION IN VIRGINIA . . . . .	375	143	23.5	181.1	17.4	35.7	116.2	441.9	670.0	1 097.8	38.3	24.0	323.8
PORTION IN NORTH CAROLINA . . . . .	10	2	.1	.6	.1	.2	.5	1.6	3.3	4.9	.1	(2)	.1
RALEIGH-DURHAM . . . . .	419	167	31.8	260.0	21.8	43.4	142.1	580.7	884.0	1 457.5	44.7	28.6	376.3
WILMINGTON . . . . .	150	67	12.1	97.7	9.0	18.1	61.1	481.2	332.3	776.5	120.7	7.8	85.7
COUNTIES													
ALAMANCE . . . . .	221	117	24.6	163.8	19.2	37.9	107.9	294.9	452.7	743.3	32.5	23.2	197.9
ALEXANDER . . . . .	61	21	2.7	14.8	2.5	4.9	12.5	25.3	41.1	66.1	1.0	2.6	18.2
ALLEGHANY . . . . .	13	5	1.3	6.0	1.2	2.4	5.5	13.1	10.2	22.6	.1	1.4	9.1
ANSON . . . . .	60	17	3.2	18.5	2.7	5.5	14.1	41.8	50.4	91.2	5.0	2.3	19.0
ASHE . . . . .	49	■	2.4	11.7	2.2	4.5	10.4	24.4	19.1	43.5	1.7	2.1	16.4
AVERY . . . . .	12	5	1.0	3.7	.9	1.6	3.2	10.4	9.6	20.1	.1	.9	4.8
BEAUFORT . . . . .	56	21	4.4	26.8	3.7	7.5	19.4	44.7	68.8	115.1	6.1	3.5	28.6
BERTIE . . . . .	47	10	1.4	7.3	1.2	2.4	5.4	14.7	12.9	27.6	1.5	1.0	8.1
BLADEN . . . . .	70	14	2.3	11.3	2.0	3.9	8.9	17.9	19.5	36.3	2.1	1.6	8.2
BRUNSWICK . . . . .	28	8	.4	2.2	.3	.6	1.6	7.5	9.6	15.9	.4	.4	5.4
BURKE . . . . .	117	71	19.9	126.9	16.4	32.5	88.1	225.8	239.6	464.6	19.5	15.5	125.3
CABARRUS . . . . .	93	53	25.4	142.8	22.4	43.1	119.7	202.7	311.8	516.5	13.5	26.0	178.2
CALDWELL . . . . .	153	83	16.3	109.3	13.9	29.0	79.7	194.4	175.2	363.6	12.1	13.4	118.3
CARTERET . . . . .	60	14	1.3	6.7	1.1	2.2	5.5	18.6	27.9	46.2	.7	1.3	8.7
CASWELL . . . . .	9	4	1.2	8.8	1.1	2.4	7.4	16.2	26.5	41.3	4.0	.4	4.5
CATAWBA . . . . .	495	257	33.5	215.0	28.6	55.5	163.2	383.7	432.7	816.2	38.5	28.5	249.5
CHATHAM . . . . .	79	33	4.9	28.3	4.2	7.7	21.4	59.9	97.3	158.0	4.4	4.5	42.7
CHEROKEE . . . . .	27	15	2.8	14.0	2.5	5.1	11.6	25.0	28.0	53.2	1.5	2.4	14.7
CHOWAN . . . . .	22	9	1.2	6.6	1.0	2.2	5.2	17.6	13.1	30.6	7.5	1.0	13.1
CLAY . . . . .	12	4	.4	1.8	.4	.7	1.5	2.8	.7	3.3	.1	.3	1.8
CLEVELAND . . . . .	144	77	16.7	108.5	14.5	31.6	85.7	249.9	269.1	512.3	39.2	13.5	147.6
COLUMBUS . . . . .	79	34	5.0	35.7	4.0	8.2	24.9	89.2	98.8	186.2	8.3	4.2	46.0
CRAVEN . . . . .	79	27	3.3	23.5	2.6	5.2	15.9	44.6	58.6	106.0	18.2	2.5	17.8
CUMBERLAND . . . . .	107	54	10.6	71.2	8.6	17.5	48.5	197.3	306.2	498.7	23.0	6.5	54.6
CARRITUCK . . . . .	10	2	.1	.6	.1	.2	.5	1.6	3.3	4.9	.1	(2)	.1
DARE . . . . .	8	2	.3	1.4	.2	.3	.7	2.8	5.2	8.1	.1	(0)	(0)
DAVIDSON . . . . .	251	106	20.2	124.9	17.3	34.7	95.1	251.6	204.8	454.5	24.4	19.2	161.8
DAVIE . . . . .	47	19	2.6	14.9	2.0	3.7	9.9	26.9	67.1	87.4	1.2	2.7	18.5
DUPLIN . . . . .	51	16	3.7	20.7	3.3	7.1	16.5	47.1	99.4	146.3	2.0	2.7	26.0
DURHAM . . . . .	112	49	13.4	129.6	8.5	16.5	64.9	300.0	607.0	911.4	16.5	12.4	205.7
EDGECOMBE . . . . .	52	32	7.0	45.7	5.9	12.3	33.8	104.6	106.1	211.4	10.8	4.5	31.9
FORSYTH . . . . .	247	116	44.9	420.3	28.1	55.7	207.1	1 151.9	997.8	2 144.0	46.4	40.3	813.1
FRANKLIN . . . . .	53	17	2.2	11.0	1.9	3.6	9.0	22.4	35.3	55.6	1.1	1.4	10.1
GASTON . . . . .	358	185	42.0	264.0	35.4	78.6	200.0	503.5	674.3	1 168.3	50.3	38.0	365.4
GRANVILLE . . . . .	42	21	3.3	19.5	2.7	5.5	13.7	43.2	64.5	109.0	4.2	2.1	15.1
GUILFORD . . . . .	765	365	58.6	438.1	42.7	84.1	256.3	912.9	917.6	1 815.9	56.4	53.9	600.1
HALIFAX . . . . .	92	35	6.5	42.8	5.8	11.7	35.7	116.6	197.4	270.8	6.2	5.9	60.0
HARNETT . . . . .	49	23	4.5	26.6	4.1	7.7	21.9	50.2	76.8	129.0	4.4	3.1	23.1
HAYWOOD . . . . .	32	16	6.0	50.5	4.9	10.1	37.9	114.3	155.2	270.8	12.5	6.0	102.4
HENDERSON . . . . .	57	22	4.5	34.0	3.6	7.7	23.1	81.0	68.0	149.3	8.3	4.5	47.4
HERTFORD . . . . .	35	10	2.0	12.4	1.7	3.7	10.0	36.5	31.9	68.8	3.9	1.7	13.0
HOKE . . . . .	7	7	3.0	20.2	2.6	5.2	13.9	35.0	91.1	123.7	(0)	(0)	(0)
IREDELL . . . . .	157	84	15.9	96.0	13.5	27.2	69.6	185.6	215.1	396.2	9.5	15.4	142.2
JACKSON . . . . .	20	7	1.6	8.0	1.4	2.6	6.6	13.3	13.0	26.4	.5	.9	10.0
JOHNSTON . . . . .	86	32	7.0	36.9	6.0	10.9	27.1	84.2	161.5	245.5	4.0	5.4	42.5
JONES . . . . .	13	2	.3	1.0	.2	.4	.8	1.6	.5	2.1	.1	.2	1.0
LEE . . . . .	84	32	6.3	38.6	5.1	10.0	25.0	88.4	97.8	185.2	8.3	6.2	54.2
LENOIR . . . . .	65	28	7.2	55.2	5.5	10.5	33.0	141.5	174.9	313.4	19.0	6.5	92.9
LINCOLN . . . . .	85	40	6.5	39.4	5.6	11.7	31.5	81.8	93.7	171.8	9.7	4.8	35.6
MC DOWELL . . . . .	55	28	7.3	43.7	6.6	13.3	36.5	95.8	107.2	201.4	7.0	6.9	64.2
MACON . . . . .	24	4	.8	3.4	.7	1.3	3.1	7.3	7.3	14.3	.2	.7	3.9
MARTIN . . . . .	35	9	1.9	9.8	1.7	3.6	8.2	22.1	42.6	64.1	3.0	1.3	8.6
MECKLENBURG . . . . .	715	286	38.7	310.1	25.3	49.9	160.9	622.3	700.2	1 280.2	46.0	33.9	366.9
MITCHELL . . . . .	36	9	1.5	6.6	1.4	2.6	5.4	10.4	15.1	25.1	.6	1.3	7.3
MONTGOMERY . . . . .	74	32	5.6	30.4	4.9	9.8	24.4	53.0	73.6	125.9	2.4	4.9	32.9
MOORE . . . . .	79	28	3.9	24.0	3.2	6.5	17.3	50.7	76.0	126.4	1.8	3.9	30.3
NASH . . . . .	106	50	8.7	50.2	7.0	13.9	34.3	91.5	224.5	313.5	17.6	5.6	43.6
NEW HANOVER . . . . .	122	59	11.7	95.5	8.7	17.5	59.5	473.7	322.7	760.6	120.3	7.4	80.3
NORTHAMPTON . . . . .	40	15	1.5	9.0	1.3	2.5	6.8	19.6	24.0	43.8	.9	1.2	9.1
ONSLOW . . . . .	34	8	1.7	8.5	1.6	3.6	5.6	14.4	8.6	23.0	1.1	.6	3.3
ORANGE . . . . .	48	18	2.3	13.2	2.0	3.9	10.4	20.1	22.6	43.2	2.0	1.0	12.2
PASQUOTANK . . . . .	32	12	1.6	9.3	1.3	2.6	6.9	17.5	15.4	32.6	.4	1.4	7.8
PENDER . . . . .	25	3	.3	1.4	.3	.7	1.1	2.9	5.9	8.7	.2	.5	2.5
PERQUIMANS . . . . .	13	2	.3	1.1	.3	.5	1.0	1.7	1.7	3.5	.3	.3	1.8
PERSON . . . . .	33	12	4.3	26.4	3.5	7.5	20.0	53.2	68.3	123.1	9.8	3.1	21.1
PITT . . . . .	89	34	6.0	35.9	5.0	9.7	24.7	132.7	122.8	255.7	3.5	4.4	41.2
POLK . . . . .	26	9	1.0	5.3	.8	1.6	3.9	8.1	21.9	30.5	1.3	.6	4.8
RANDOLPH . . . . .	229	98	18.2	112.9	15.4	30.3	85.7	237.5	286.3	520.9	19.8	16.3	150.2
RICHMOND . . . . .	56	28	5.1	30.4	4.6	9.5	25.7	44.5	63.8	111.8	(0)	5.6	43.8

See footnotes at end of table.



TABLE 2. General Statistics for the State, Standard Metropolitan Statistical Areas, and Counties: 1972 and 1967—Continued

(See appendix, Explanation of Terms)

State, standard metropolitan statistical areas, and counties <sup>1</sup>	1972										1967		
	Establishments		All employees <sup>2</sup>		Production workers			Value added by manufacture	Cost of materials <sup>3</sup>	Value of shipments <sup>3</sup>	Capital expenditures, new	All employees	Value added by manufacture
	Total	With 20 employees or more	Number	Payroll	Number	Man-hours	Wages						
	(number)	(number)	(1,000)	(million dollars)	(1,000)	(million)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(1,000)	(million dollars)	
COUNTIES—CONTINUED													
ROBESON . . . . .	105	50	10.4	52.5	8.9	17.2	40.7	113.5	150.7	261.1	10.1	5.9	47.6
ROCKINGHAM . . . . .	90	55	17.9	117.1	14.8	29.6	84.5	313.3	642.6	956.1	23.1	14.9	231.3
ROWAN . . . . .	126	68	13.4	88.0	11.2	22.8	66.4	233.1	243.5	476.4	19.0	11.6	121.6
RUTHERFORD . . . . .	69	29	9.7	59.3	8.6	17.6	48.4	148.1	98.6	246.3	7.2	9.1	72.2
SAMPSON . . . . .	72	24	3.5	20.3	3.1	6.1	15.3	43.2	84.4	125.9	9.0	3.4	20.5
SCOTLAND . . . . .	37	20	6.1	37.5	5.4	11.4	30.9	71.4	141.5	212.7	5.0	4.8	40.4
STANLY . . . . .	80	41	10.6	59.6	9.3	18.3	47.3	140.4	143.0	297.0	8.3	9.6	98.0
SURRY . . . . .	106	49	14.0	73.8	12.6	24.8	60.7	155.3	148.4	306.1	6.0	12.3	94.2
SWAIN . . . . .	11	5	.8	4.1	.7	1.4	3.0	7.4	5.6	12.9	.3	1.0	5.6
UNION . . . . .	105	46	7.2	41.2	6.1	12.0	34.0	92.9	124.5	218.3	6.6	5.4	47.7
VANCE . . . . .	54	33	6.6	39.8	5.9	12.4	31.0	75.5	81.0	154.1	7.0	3.8	36.7
WAKE . . . . .	259	100	16.1	117.2	11.3	23.0	66.8	260.6	254.4	502.9	26.2	15.2	158.4
WARREN . . . . .	48	7	1.0	5.1	.9	1.8	4.1	8.8	12.0	19.9	.3	.8	3.8
WATAUGA . . . . .	33	5	2.0	11.1	1.8	3.4	8.9	22.3	12.5	34.6	1.0	1.6	13.5
WAYNE . . . . .	77	33	5.1	29.5	4.1	8.3	21.0	66.1	83.4	149.1	2.5	4.2	37.4
WILKES . . . . .	100	28	7.7	41.1	6.5	13.0	31.4	89.9	133.4	223.1	8.4	5.2	37.0
WILSON . . . . .	69	38	6.3	35.4	5.2	10.3	25.2	91.8	217.8	303.0	4.9	5.3	44.3
YANCEY . . . . .	19	8	1.0	5.3	.9	1.7	4.4	9.6	19.2	28.7	.5	(D)	(D)

(D) Withheld to avoid disclosing figures for individual companies. (Z) Less than half of the unit of measurement shown.

<sup>1</sup>Some counties were withheld from publication in order to (a) avoid disclosing figures for individual companies or (b) permit further checking of the figures for smaller counties. Additional detail will appear in the final report for this State.<sup>2</sup>Includes employment and payroll at central administrative offices and auxiliary units. (For a definition of these units, see appendix.)<sup>3</sup>The total cost of materials and value of shipments may include extensive duplication arising from shipments between establishments in the same industry classification. (For a more complete explanation, see appendix.)<sup>4</sup>The standard metropolitan statistical areas in this State are defined as follows:

ASHEVILLE SMSA: Consists of Buncombe and Madison Counties, NC.

BURLINGTON SMSA: Coextensive with Alamance County, NC.

CHARLOTTE-GASTONIA SMSA: Consists of Gaston, Mecklenburg, and Union Counties, NC.

FAYETTEVILLE SMSA: Coextensive with Cumberland County, NC.

GREENSBORO-WINSTON-SALEM-HIGH POINT SMSA: Consists of Davidson, Forsyth, Guilford, Randolph, Stokes, and Yadkin Counties, NC.

NORFOLK-VIRGINIA BEACH-PORTSMOUTH, VA-NC, SMSA: Consists of Chesapeake, Nansemond, Norfolk, Portsmouth, Suffolk, and Virginia Beach cities, VA, and Currituck County, NC.

RALEIGH-DURHAM SMSA: Consists of Durham, Orange, and Wake Counties, NC.

WILMINGTON SMSA: Consists of Brunswick and New Hanover Counties, NC.

TABLE 3. General Statistics for the State, by Industry Groups and Industries: 1972 and 1967

(See appendix, Explanation of Terms)

Code	Industry	1972											1967	
		Establishments		All employees		Production workers			Value added by manufacture	Cost of materials <sup>1</sup>	Value of shipments <sup>1</sup>	Capital expenditures, new <sup>1</sup>	All employees	Value added by manufacture
		Total	With 20 employees or more	Number	Payroll	Number	Man-hours	Wages						
		(number)	(number)	(1,000)	(million dollars)	(1,000)	(million)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(1,000)	(million dollars)	
	ALL INDUSTRIES, TOTAL <sup>2</sup> . . . . .	8 578	3 784	750.8	5 017.4	604.4	1 214.3	3 436.0	11 023.1	13 314.5	24 161.7	989.4	643.8	6 606.5
20	FOOD AND KINDRED PRODUCTS. . . . .	659	307	37.4	249.9	23.5	47.8	133.8	637.9	1 392.5	2 026.2	46.4	36.2	403.3
201	MEAT PRODUCTS. . . . .	156	59	11.6	66.6	9.8	19.3	51.1	125.3	486.0	609.7	6.2	9.7	73.8
2011	MEATPACKING PLANTS. . . . .	80	21	2.4	19.6	1.7	3.5	12.6	36.8	168.8	204.5	2.5	2.3	22.8
2013	SAUSAGES AND OTHER PREPARED MEATS. . . . .	44	12	1.3	8.2	1.0	2.0	5.4	18.8	62.0	80.2	2.2	.7	7.3
2016	POULTRY DRESSING PLANTS. . . . .	32	26	8.0	38.7	7.1	13.7	33.0	69.7	255.2	325.1	1.5	(NA)	(NA)
202	DAIRY PRODUCTS. . . . .	45	33	3.2	22.6	1.6	3.4	9.8	70.5	158.0	228.6	4.0	4.6	63.6
2026	FLUID MILK. . . . .	32	26	2.9	20.4	1.4	3.0	8.7	62.8	141.4	204.2	3.4	4.2	57.9
203	PRESERVED FRUITS AND VEGETABLES. . . . .	24	10	1.5	9.3	1.3	2.7	6.9	35.8	49.7	85.7	3.5	(NA)	(NA)
2035	PICKLES, SAUCES, AND SALAD DRESSINGS. . . . .	11	6	.7	4.6	.6	1.4	3.4	7.7	18.8	26.7	2.0	.9	8.0
204	GRAIN MILL PRODUCTS. . . . .	128	36	2.2	15.0	1.4	3.1	8.9	62.0	254.0	315.5	4.6	2.8	41.2
205	BAKERY PRODUCTS. . . . .	66	45	9.8	74.2	5.0	10.4	30.7	138.1	120.4	257.7	(D)	8.8	108.2
2051	BREAD, CAKE, AND RELATED PRODUCTS. . . . .	59	40	6.6	46.8	3.5	7.5	22.5	96.4	84.1	180.5	5.1	6.3	73.4
207	FATS AND OILS. . . . .	28	16	1.0	7.4	.8	1.8	5.6	25.5	125.7	150.0	1.5	(NA)	(NA)
2077	ANIMAL AND MARINE FATS AND OILS. . . . .	18	9	.6	4.7	.5	1.2	3.9	13.8	18.7	32.1	1.0	.6	8.2
208	BEVERAGES. . . . .	98	76	5.7	43.4	2.1	4.6	14.3	148.7	160.6	309.1	8.8	5.1	59.4
2092	FRESH OR FROZEN PACKAGED FISH. . . . .	17	3	.3	.8	.2	.3	.6	2.1	3.9	5.9	.1	88	(D)
21	TOBACCO PRODUCTS. . . . .	37	29	23.0	190.0	20.3	37.2	156.5	1 263.7	1 619.2	2 883.5	23.0	27.3	975.9
2111	CIGARETTES. . . . .	5	5	17.6	159.6	15.8	28.9	136.6	1 198.5	826.9	2 026.3	18.0	18.5	898.7
22	TEXTILE MILL PRODUCTS. . . . .	1 408	1 052	276.4	1 630.2	246.6	507.5	1 337.0	3 036.8	4 551.0	7 557.4	389.0	257.2	2 022.5
2211	WEAVING MILLS, COTTON. . . . .	52	45	32.5	198.1	30.0	60.6	177.3	297.6	429.5	728.0	22.1	46.5	349.2
2221	WEAVING MILLS, SYNTHETICS. . . . .	77	71	44.1	282.9	39.6	85.6	238.3	524.7	607.6	1 122.9	46.5	42.3	351.6
2231	WEAVING AND FINISHING MILLS, WOOL. . . . .	9	5	2.6	17.2	2.3	4.8	13.2	19.1	42.7	63.6	.5	4.0	34.1
2241	NARROW FABRIC MILLS. . . . .	47	36	3.9	21.8	3.5	7.1	17.4	50.1	44.9	94.4	3.1	3.4	27.5
225	KNITTING MILLS. . . . .	740	507	94.0	517.4	81.6	159.7	400.9	1 009.4	1 470.1	2 469.3	146.9	80.6	591.6
2251	WOMEN'S HOSIERY, EXCEPT SOCKS. . . . .	172	126	30.1	152.7	26.0	48.0	121.4	268.0	347.4	622.1	10.4	35.0	257.2
2252	HOSIERY, NEC. . . . .	275	170	19.3	94.3	17.5	32.3	77.1	177.0	201.6	376.9	7.4	22.5	129.7
2253	KNIT OUTERWEAR MILLS. . . . .	63	34	8.3	41.8	7.1	13.5	30.0	97.5	74.1	166.4	2.6	7.2	50.9
2254	KNIT UNDERWEAR MILLS. . . . .	14	11	5.1	22.0	4.9	9.3	19.9	32.7	54.1	95.8	1.4	6.7	44.9
226	TEXTILE FINISHING, EXCEPT WOOL. . . . .	82	72	15.1	97.2	12.6	25.9	72.8	216.3	307.4	517.9	30.2	12.8	121.1
2269	FINISHING PLANTS, NEC. . . . .	39	32	4.7	27.7	4.1	8.4	20.7	58.9	108.6	166.7	9.4	3.0	27.8
227	FLOOR COVERING MILLS. . . . .	42	14	3.0	20.3	2.5	5.9	15.0	52.6	94.0	138.7	7.2	88	(D)
228	YARN AND THREAD MILLS. . . . .	274	251	74.0	426.6	68.0	144.1	363.3	762.0	1 377.4	2 142.2	122.1	58.8	470.7
2281	YARN MILLS, EXCEPT WOOL. . . . .	187	172	49.0	277.4	46.1	98.7	245.5	450.9	680.0	1 132.3	47.7	45.5	338.4
2282	THROWING AND WINDING MILLS. . . . .	57	56	18.9	114.4	16.6	34.7	90.0	232.7	565.3	801.8	71.1	6.7	71.2
2283	WOOL YARN MILLS. . . . .	12	7	1.2	7.6	1.1	2.4	6.4	13.4	30.8	43.7	.9	2.2	26.8
2284	THREAD MILLS. . . . .	18	16	4.8	27.2	4.3	8.3	21.4	64.9	101.2	164.3	2.4	4.3	40.2
229	MISCELLANEOUS TEXTILE GOODS. . . . .	85	51	7.3	48.7	6.5	13.8	38.9	104.9	177.5	280.4	10.4	6.4	54.4
2293	PADDINGS AND UPHOLSTERY FILLING. . . . .	10	9	.4	3.0	.3	.7	1.9	5.8	10.2	15.9	.5	.7	6.1
2294	PROCESSED TEXTILE WASTE. . . . .	10	5	.5	2.6	.4	.9	2.1	5.2	8.2	13.4	(D)	.5	3.7
2298	CORDAGE AND TWINE. . . . .	13	12	1.0	6.2	1.0	1.9	5.4	9.9	9.5	19.2	.5	1.4	10.1
23	APPAREL, OTHER TEXTILE PRODUCTS. . . . .	553	413	78.7	351.8	70.3	129.7	280.9	634.7	739.2	1 342.8	19.7	64.6	351.3
232	MEN'S AND BOYS' FURNISHINGS. . . . .	123	108	23.1	94.5	20.7	37.0	76.2	161.2	147.6	304.4	4.9	22.6	111.1
2321	MEN'S AND BOYS' SHIRTS AND NIGHTWEAR. . . . .	55	50	11.5	48.0	10.4	18.5	39.5	82.5	80.4	161.1	2.9	11.8	49.1
2322	MEN'S AND BOYS' UNDERWEAR. . . . .	17	16	2.8	10.3	2.7	5.1	9.8	23.6	15.1	39.6	.2	3.0	21.0
2323	MEN'S AND BOYS' NECKWEAR. . . . .	9	6	1.1	4.6	1.0	1.8	3.7	6.7	3.5	10.2	.1	.5	2.5
2327	MEN'S AND BOYS' SEPARATE TROUSERS. . . . .	9	7	2.7	11.1	2.3	3.7	8.7	18.4	16.7	34.6	.4	2.3	12.6
2328	MEN'S AND BOYS' WORK CLOTHING. . . . .	24	23	4.0	16.1	3.3	5.9	11.5	23.9	25.4	46.8	.9	3.8	16.8
2329	MEN'S AND BOYS' CLOTHING, NEC. . . . .	8	8	1.0	4.3	1.0	1.9	3.1	6.1	6.4	12.1	.4	1.3	9.0
233	WOMEN'S AND MISSES' OUTERWEAR. . . . .	148	110	15.2	64.5	13.5	25.1	51.2	120.2	94.1	202.9	2.7	10.4	51.2
2331	WOMEN'S, MISSES' BLOUSES, WAISTS. . . . .	20	19	3.7	16.6	3.2	6.4	10.8	27.6	20.5	47.3	1.0	1.4	6.3
2335	WOMEN'S AND MISSES' DRESSES. . . . .	74	43	4.4	18.3	3.9	6.8	14.8	28.6	11.2	39.4	.4	4.1	20.5
2337	WOMEN'S AND MISSES' SUITS AND COATS. . . . .	5	4	.4	1.4	.4	.6	1.2	1.7	.2	1.9	.1	.5	3.5
2339	WOMEN'S, MISSES' OUTERWEAR, NEC. . . . .	49	44	6.7	28.2	6.1	11.3	24.4	62.3	62.3	114.3	1.2	4.4	20.8
234	WOMEN'S, CHILDREN'S UNDERGARMENTS. . . . .	62	56	12.1	53.3	10.7	19.4	39.6	99.3	72.4	168.6	1.9	7.3	61.5
2369	CHILDREN'S OUTERWEAR, NEC. . . . .	12	11	2.3	9.7	2.1	4.1	8.7	14.4	9.9	24.3	.2	3.3	14.0
238	MISC. APPAREL AND ACCESSORIES. . . . .	27	22	3.9	21.7	3.5	6.4	18.3	33.8	25.4	59.7	.3	4.0	21.6
2381	FABRIC DRESS AND WORK GLOVES. . . . .	11	10	2.1	13.3	2.0	3.6	12.4	16.0	12.7	29.1	.2	2.0	10.9
2384	ROBES AND DRESSING GOWNS. . . . .	6	6	.6	2.5	.5	1.0	2.1	6.6	3.9	10.6	.1	.6	3.1
239	MISC. FABRICATED TEXTILE PRODUCTS. . . . .	140	68	15.5	81.5	13.8	27.1	64.5	164.5	360.9	513.5	7.0	11.2	76.8
2391	CURTAINS AND DRAPERIES. . . . .	32	17	5.9	28.3	5.4	10.7	24.3	61.2	137.0	191.0	1.7	2.8	18.5
2392	HOUSEFURNISHINGS, NEC. . . . .	39	21	5.6	31.7	4.8	9.6	24.1	64.9	156.7	220.3	2.3	5.1	31.5
2393	TEXTILE BAGS. . . . .	8	6	.9	4.7	.8	1.6	3.8	8.3	20.6	27.6	1.8	1.0	10.7
2394	CANVAS AND RELATED PRODUCTS. . . . .	12	4	.6	3.8	.5	1.0	1.9	8.0	10.6	17.1	.4	88	(D)
2399	FABRICATED TEXTILE PRODUCTS, NEC. . . . .	25	10	1.7	9.1	1.5	3.0	7.3	16.2	29.3	45.0	.7	1.0	7.3

See footnotes at end of table.



TABLE 3. General Statistics for the State, by Industry Groups and Industries: 1972 and 1967—Continued

(See appendix, Explanation of Terms)

Code	Industry	1972											1967	
		Establishments		All employees		Production workers			Value added by manufacture	Cost of materials <sup>1</sup>	Value of shipments <sup>1</sup>	Capital expenditures, new	All employees	Value added by manufacture
		Total	With 20 employees or more	Number	Payroll	Number	Man-hours	Wages						
		(number)	(number)	(1,000)	(million dollars)	(1,000)	(million)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(1,000)	(million dollars)
24	LUMBER AND WOOD PRODUCTS . . . . .	1 945	351	32.1	186.7	27.9	54.5	149.0	370.8	572.1	941.1	33.7	(NA)	(NA)
2411	LOGGING CAMPS, LOGGING CONTRACTORS . .	716	19	3.1	14.6	2.7	4.8	12.3	36.0	45.4	81.3	5.6	2.6	20.2
242	SAWMILLS AND PLANING MILLS . . . . .	854	162	11.8	69.4	10.5	20.8	55.0	131.0	207.4	338.2	13.6	11.6	76.8
2421	SAWMILLS AND PLANING MILLS, GENERAL .	702	105	7.8	47.1	6.8	13.8	37.2	99.3	173.1	272.0	11.2	8.4	57.5
2426	HARDWOOD DIMENSION AND FLOORING . . .	140	55	3.9	21.8	3.6	6.8	17.4	30.8	33.3	64.2	2.4	(NA)	(NA)
243	MILLWORK, PLYWOOD, STRUC. MEMBERS .	195	88	7.9	48.5	6.9	14.3	37.0	101.5	145.5	245.4	4.9	(NA)	(NA)
2431	MILLWORK . . . . .	64	16	1.2	7.2	1.0	1.7	4.9	15.8	28.6	44.8	.8	(NA)	(NA)
2434	WOOD KITCHEN CABINETS . . . . .	43	6	1.2	8.7	.9	2.2	6.1	15.9	14.9	30.3	.3	(NA)	(NA)
2435	HARDWOOD VENEER AND PLYWOOD . . . . .	66	53	3.8	21.4	3.5	7.3	17.3	42.1	71.5	112.8	1.5	(NA)	(NA)
2436	SOFTWOOD VENEER AND PLYWOOD . . . . .	11	9	1.3	8.7	1.2	2.6	7.1	24.2	22.6	46.1	1.8	(NA)	(NA)
2439	STRUCTURAL WOOD MEMBERS, NEC . . . . .	11	4	.4	2.5	.3	.5	1.6	3.5	7.9	11.4	.5	(NA)	(NA)
244	WOOD CONTAINERS . . . . .	29	14	1.4	6.3	1.2	2.4	5.3	10.6	10.8	21.3	.4	(NA)	(NA)
2448	WOOD PALLETS AND SKIDS . . . . .	10	7	.5	2.2	.4	.8	1.8	4.6	4.3	8.9	.2	(NA)	(NA)
2449	WOOD CONTAINERS, NEC . . . . .	13	6	.9	3.9	.8	1.6	3.3	5.6	5.9	11.5	.1	(NA)	(NA)
245	WOOD BUILDINGS AND MOBILE HOMES . .	36	31	3.6	23.0	2.9	5.1	20.5	41.9	109.7	154.1	4.4	(NA)	(NA)
2451	MOBILE HOMES . . . . .	31	26	3.0	19.5	2.5	4.4	18.6	36.2	96.0	134.6	2.9	(NA)	(NA)
2452	PREFABRICATED WOOD BUILDINGS . . . . .	6	6	.6	3.5	.4	.7	1.8	5.7	13.7	19.5	1.5	(NA)	(NA)
249	MISCELLANEOUS WOOD PRODUCTS . . . . .	115	37	4.3	24.9	3.7	7.1	18.9	49.8	53.3	100.8	4.8	(NA)	(NA)
2491	WOOD PRESERVING . . . . .	18	5	.3	1.8	.2	.5	1.4	5.5	8.5	13.1	.4	(NA)	3.2
2492	PARTICLEBOARD . . . . .	5	5	.7	5.8	.7	1.5	4.6	7.9	9.6	17.6	(D)	(NA)	(NA)
2499	WOOD PRODUCTS, NEC . . . . .	92	27	3.2	17.3	2.8	5.2	12.9	36.4	35.1	70.1	1.7	(NA)	(NA)
25	FURNITURE AND FIXTURES . . . . .	551	351	71.2	442.9	62.9	126.3	352.0	830.2	729.4	1 544.1	46.6	58.5	516.7
251	HOUSEHOLD FURNITURE . . . . .	463	307	64.0	398.2	56.8	114.0	318.3	743.4	655.8	1 384.8	41.7	(NA)	(NA)
2511	WOOD HOUSEHOLD FURNITURE . . . . .	155	105	35.2	212.8	31.9	66.1	175.7	408.6	319.2	719.4	24.4	(NA)	(NA)
2512	UPHOLSTERED HOUSEHOLD FURNITURE . .	244	171	24.0	157.3	20.8	39.7	121.7	283.6	277.7	556.1	15.6	(NA)	(NA)
2514	METAL HOUSEHOLD FURNITURE . . . . .	19	13	2.3	13.4	2.1	4.2	10.9	23.5	30.5	53.7	.7	1.4	13.2
2515	MATTRESSES AND BEDSPRINGS . . . . .	34	15	1.1	6.5	.8	1.5	3.7	13.3	17.5	30.5	.4	EE	(D)
252	OFFICE FURNITURE . . . . .	19	16	4.0	24.9	3.4	7.0	18.5	51.0	38.5	88.9	3.0	2.3	27.1
254	PARTITIONS AND FIXTURES . . . . .	30	16	1.8	11.9	1.5	3.1	9.2	20.4	20.6	40.1	.8	.8	7.4
2541	WOOD PARTITIONS AND FIXTURES . . . . .	25	13	1.6	10.6	1.4	2.9	8.4	17.4	16.3	32.9	.7	CC	(D)
26	PAPER AND ALLIED PRODUCTS . . . . .	133	99	16.5	150.0	13.0	27.7	107.9	320.5	427.6	751.6	38.6	15.5	227.8
2621	PAPERMILLS, EXCEPT BUILDING PAPER . .	8	6	4.9	51.0	3.7	8.5	36.9	114.4	116.3	232.1	17.2	6.2	118.7
264	MISC. CONVERTED PAPER PRODUCTS . . .	31	19	2.3	17.3	1.8	3.7	11.5	51.4	82.0	133.4	1.4	1.2	16.5
2643	BAGS, EXCEPT TEXTILE BAGS . . . . .	8	6	.7	5.6	.5	1.1	3.2	8.7	12.6	21.1	.3	.2	2.1
2649	CONVERTED PAPER PRODUCTS, NEC . . . .	5	5	.4	3.3	.3	.6	1.8	6.3	8.8	15.1	.4	(NA)	(NA)
265	PAPERBOARD CONTAINERS AND BOXES . . .	81	64	6.1	44.6	4.9	9.9	31.3	87.2	117.4	203.7	9.1	5.0	45.2
2651	FOLDING PAPERBOARD BOXES . . . . .	15	14	.9	6.1	.7	1.5	4.1	13.4	12.3	25.0	1.0	.9	8.7
2652	SETUP PAPERBOARD BOXES . . . . .	23	15	1.1	6.4	1.0	1.8	4.9	13.8	10.5	24.2	.4	1.0	6.7
2653	CORRUGATED AND SOLID FIBER BOXES . .	28	25	3.1	25.1	2.4	5.0	17.3	44.3	75.0	119.6	5.7	2.2	21.1
2654	SANITARY FOOD CONTAINERS . . . . .	5	4	.5	4.0	.4	.9	2.9	9.0	14.0	22.6	.5	.4	5.6
2655	FIBER CANS, DRUMS, SIMILAR PRODUCTS .	10	6	.5	3.0	.4	.8	2.1	6.7	5.6	12.3	1.5	.4	3.2
27	PRINTING AND PUBLISHING . . . . .	694	150	13.8	102.3	9.1	17.1	59.2	205.9	98.9	303.9	11.6	12.3	126.1
2711	NEWSPAPERS . . . . .	163	57	6.6	49.8	3.4	6.3	23.3	105.0	29.9	135.0	5.2	5.9	62.7
273	BOOKS . . . . .	15	6	.8	5.9	.6	1.2	3.6	10.7	4.5	15.2	.2	.5	4.0
2732	BOOK PRINTING . . . . .	5	5	.7	5.3	.5	1.1	3.1	8.4	3.6	11.9	(D)	.5	3.9
275	COMMERCIAL PRINTING . . . . .	395	57	4.4	33.3	3.5	6.8	23.0	65.7	51.7	116.6	5.1	(NA)	(NA)
2751	COMMERCIAL PRINTING, LETTERPRESS . .	250	29	2.1	16.4	1.7	3.3	11.2	30.8	20.7	51.2	3.1	(NA)	(NA)
2752	COMMERCIAL PRINTING, LITHOGRAPHIC . .	137	24	1.6	13.1	1.3	2.5	8.9	24.9	15.7	40.3	1.7	(NA)	(NA)
2761	MANIFOLD BUSINESS FORMS . . . . .	17	9	.7	4.9	.5	1.1	3.9	9.7	8.0	17.7	.6	.7	7.4
278	BLANKBOOKS AND BOOKBINDING . . . . .	21	11	.7	3.6	.6	1.1	2.5	5.2	2.0	7.3	.2	.6	3.0
2782	BLANKBOOKS AND LOOSELEAF BINDERS . .	11	8	.3	1.4	.2	.5	1.1	2.4	.9	3.3	.1	.2	.7
2789	BOOKBINDING AND RELATED WORK . . . . .	10	8	.4	2.2	.3	.6	1.5	2.9	1.1	3.9	.1	.5	2.3
279	PRINTING TRADE SERVICES . . . . .	41	6	.3	3.2	.2	.4	2.2	5.3	1.1	6.3	.2	(NA)	(NA)
28	CHEMICALS AND ALLIED PRODUCTS . . . .	230	108	27.0	240.0	19.2	38.9	144.8	888.8	741.0	1 629.4	189.4	17.7	370.6
281	INDUSTRIAL INORGANIC CHEMICALS . . .	14	5	.8	7.9	.5	1.1	4.2	19.1	23.2	41.5	3.8	(NA)	(NA)
282	PLASTICS MATERIALS AND SYNTHETICS . .	22	21	16.6	145.9	12.9	26.2	100.4	456.6	400.3	854.9	131.7	(NA)	(NA)
2824	ORGANIC FIBERS, NONCELLULOSIC . . . .	12	12	16.2	142.8	12.6	25.7	98.4	444.0	373.8	816.0	130.5	10.2	199.2
284	SOAPS, CLEANERS, AND TOILET GOODS . .	50	19	2.0	18.0	1.0	1.8	5.1	63.1	47.8	108.7	8.5	(NA)	(NA)
2843	SURFACE ACTIVE AGENTS . . . . .	13	10	.5	4.6	.2	.4	1.5	14.5	22.1	35.1	3.7	.4	10.3
2851	PAINTS AND ALLIED PRODUCTS . . . . .	17	11	1.2	13.5	.5	1.1	3.9	31.9	39.0	70.3	2.9	.7	14.4
286	INDUSTRIAL ORGANIC CHEMICALS . . . .	21	10	1.4	13.7	.9	1.7	7.3	73.9	83.2	163.8	(D)	(NA)	(NA)
287	AGRICULTURAL CHEMICALS . . . . .	50	26	2.4	19.7	1.7	3.6	13.1	65.0	87.8	152.6	5.7	(NA)	(NA)
2874	PHOSPHATIC FERTILIZERS . . . . .	8	7	1.2	12.1	1.0	2.2	9.5	33.1	40.2	72.8	4.4	(NA)	(NA)
2875	FERTILIZERS, MIXING ONLY . . . . .	30	14	.9	5.3	.6	1.1	2.7	16.3	36.4	52.2	.7	.8	7.9
2899	CHEMICAL PREPARATIONS, NEC . . . . .	29	4	.8	5.6	.4	.9	2.1	14.6	12.1	26.4	(D)	(NA)	(NA)
30	RUBBER AND MISC. PLASTICS PROD . . .	154	80	15.7	109.9	12.6	25.2	76.6	268.8	244.6	508.9	30.3	(NA)	(NA)
3011	TIRES AND INNER TUBES . . . . .	7	4	2.7	25.9	2.1	4.5	19.0	87.8	82.9	169.4	9.7	AA	(D)
3079	MISCELLANEOUS PLASTICS PRODUCTS . . .	122	61	7.7	52.3	6.1	12.3	33.7	129.0	121.9	248.3	16.8	(NA)	(NA)

See footnotes at end of table.

TABLE 3. General Statistics for the State, by Industry Groups and Industries: 1972 and 1967—Continued

(See appendix, Explanation of Terms)

Code	Industry	1972											1967	
		Establishments		All employees		Production workers			Value added by manufacture	Cost of materials <sup>1</sup>	Value of shipments <sup>1</sup>	Capital expenditures, million	All employees	Value added by manufacture
		Total	With 20 employees or more	Number	Payroll	Number	Man-hours	Wages	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(1,000)	(million dollars)
		(number)	(number)	(1,000)	(million dollars)	(1,000)	(million)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(1,000)	(million dollars)
31	LEATHER AND LEATHER PRODUCTS . .	41	15	3.5	19.2	2.9	5.6	14.1	34.4	46.1	80.1	.5	3.3	27.6
314	FOOTWEAR, EXCEPT RUBBER. . . . .	9	9	3.0	15.8	2.5	4.8	11.8	27.2	37.4	65.1	.3	2.8	22.7
3143	MEN'S FOOTWEAR, EXCEPT ATHLETIC. . .	4	4	1.9	10.6	1.6	3.0	7.7	13.3	28.2	41.7	.2	(NA)	(NA)
32	STONE, CLAY, AND GLASS PRODUCTS.	385	146	15.0	110.1	11.9	24.7	78.7	262.6	219.9	482.1	29.6	12.8	141.3
322	GLASS, GLASSWARE, PRESSED OR BLOWN	7	7	3.3	27.9	2.9	6.1	23.3	73.1	39.7	113.2	4.4	2.4	28.6
3231	PRODUCTS OF PURCHASED GLASS, NEC . .	17	■	1.3	8.9	1.0	2.3	5.3	23.7	30.9	53.7	3.2	1.0	9.9
325	STRUCTURAL CLAY PRODUCTS . . . . .	32	28	2.8	19.1	2.3	4.7	13.7	36.4	25.3	62.3	4.1	3.0	29.8
327	CONCRETE, GYPSUM, PLASTER PRODUCTS	262	84	4.8	34.3	3.5	7.2	22.6	81.7	93.2	174.6	11.0	4.1	46.1
3272	CONCRETE PRODUCTS, NEC . . . . .	94	24	1.6	11.4	1.3	2.7	7.9	24.1	14.7	38.7	2.4	1.6	16.9
3273	READY-MIXED CONCRETE . . . . .	122	40	2.3	17.1	1.6	3.4	11.4	43.8	63.0	106.7	7.0	1.6	19.8
3281	CUT STONE AND STONE PRODUCTS . . . .	21	6	.6	3.7	.5	.9	2.8	5.4	2.5	7.8	.4	CC	(D)
329	MISC. NONMETALLIC MINERAL PRODUCTS	31	10	1.9	13.4	1.5	3.0	8.9	32.9	23.4	56.1	1.3	(NA)	(NA)
33	PRIMARY METAL INDUSTRIES . . . . .	67	38	5.3	40.6	4.4	9.0	30.4	108.0	131.6	254.5	5.6	5.7	94.2
331	BLAST FURNACE, BASIC STEEL PROD. .	7	■	.5	3.8	.4	.9	2.9	11.0	11.6	22.0	.9	BB	(D)
332	IRON AND STEEL FOUNDRIES . . . . .	15	11	1.4	10.0	1.3	2.6	8.6	21.1	14.7	35.6	.7	1.5	14.5
3321	GRAY IRON FOUNDRIES . . . . .	15	11	1.4	10.0	1.3	2.6	8.6	21.1	14.7	35.6	.7	EE	(D)
335	NONFERROUS ROLLING AND DRAWING . .	17	16	2.4	17.0	1.9	4.0	12.0	54.3	80.4	133.4	2.8	2.9	45.4
34	FABRICATED METAL PRODUCTS. . . . .	358	156	17.2	136.4	13.3	26.8	90.8	300.9	373.5	668.6	20.2	(NA)	(NA)
342	CUTLERY, HANDTOOLS AND HARDWARE. .	26	16	2.0	13.4	1.7	3.3	9.4	33.4	18.6	51.7	5.1	1.9	31.7
3429	HARDWARE, NEC. . . . .	15	10	1.6	10.6	1.3	2.5	7.4	27.4	15.6	43.1	4.8	1.1	18.4
343	PLUMBING, HEATING, EXC. ELECTRIC .	12	5	.5	3.1	.4	.8	2.1	10.0	10.0	19.5	1.0	(NA)	(NA)
344	FABRICATED STRUCTURAL METAL PROD. .	174	72	7.4	58.9	5.6	11.4	38.0	123.2	192.9	313.0	5.3	5.4	77.4
3441	FABRICATED STRUCTURAL METAL PRODUCTS	41	25	2.9	24.6	2.1	4.6	14.7	51.0	80.2	126.5	2.8	1.8	21.8
3442	METAL DOORS, SASH, AND TRIM. . . . .	22	9	.7	4.7	.5	.9	2.7	10.5	13.4	23.7	.4	.6	5.1
3443	FABRICATED PLATEWORK (BOILER SHOP).	21	10	1.6	12.4	1.4	2.7	10.1	29.7	31.0	60.6	.9	1.3	29.2
3444	SHEET METALWORK. . . . .	58	19	1.7	12.4	1.2	2.6	8.0	22.4	48.0	72.4	.9	1.1	13.2
347	METAL SERVICES, NEC. . . . .	44	12	.9	6.2	.8	1.5	4.3	11.8	6.0	17.8	.7	.7	5.4
349	MISC. FABRICATED METAL PRODUCTS. .	65	33	4.4	37.7	3.3	6.5	24.8	70.1	87.5	156.3	4.6	(NA)	(NA)
3494	VALVES AND PIPE FITTINGS . . . . .	9	8	1.1	8.8	.7	1.5	5.5	21.0	14.4	36.1	.9	1.1	16.0
3495	WIRE SPRINGS . . . . .	13	10	1.3	8.6	1.1	2.1	6.1	13.7	16.0	29.3	.8	(NA)	(NA)
3498	FABRICATED PIPE AND FITTINGS . . . .	8	3	.4	3.9	.3	.6	2.7	5.5	9.4	15.4	(D)	AA	(D)
3499	FABRICATED METAL PRODUCTS, NEC . . .	21	6	.3	3.0	.3	.5	2.0	5.3	3.8	8.8	(D)	(NA)	(NA)
35	MACHINERY, EXCEPT ELECTRICAL . .	643	181	31.2	281.9	20.6	42.1	144.5	723.5	557.5	1 229.4	49.5	21.8	270.9
352	FARM AND GARDEN MACHINERY. . . . .	32	11	2.2	15.0	1.6	3.3	8.9	26.9	32.4	60.7	.8	(NA)	(NA)
354	METALWORKING MACHINERY . . . . .	63	17	3.2	24.4	2.6	4.6	16.8	65.2	50.9	117.4	5.8	1.3	12.3
3544	SPECIAL DIES, TOOLS, JIGS, FIXTURES.	39	7	.8	7.1	.7	1.3	5.7	12.6	5.5	18.0	1.6	.6	4.9
355	SPECIAL INDUSTRY MACHINERY . . . . .	161	75	10.6	91.0	6.9	14.3	47.5	393.3	189.0	536.8	18.6	9.5	134.3
3551	FOOD PRODUCTS MACHINERY. . . . .	5	4	.3	3.0	.2	.4	1.3	5.0	2.9	7.7	.1	BB	(D)
3552	TEXTILE MACHINERY. . . . .	121	55	6.3	49.8	4.4	9.4	29.2	108.8	81.1	187.2	3.6	7.4	87.6
356	GENERAL INDUSTRIAL MACHINERY . . .	41	17	2.2	17.6	1.6	3.4	9.7	34.7	38.3	69.3	3.4	.9	12.8
3564	BLOWERS AND FANS . . . . .	7	4	.3	2.4	.3	.5	1.5	6.2	4.3	10.5	.1	(NA)	(NA)
3569	GENERAL INDUSTRIAL MACHINERY, NEC. .	15	6	.8	5.1	.6	1.3	3.1	13.4	9.1	21.7	2.3	.4	5.6
358	REFRIGERATION, SERVICE MACHINERY .	27	■	3.1	26.0	2.0	4.0	14.1	44.3	50.1	90.9	.8	2.4	28.8
359	MISC. MACHINERY, EXCEPT ELECTRICAL	278	32	2.5	19.6	2.0	4.1	14.1	35.7	17.9	53.7	1.6	(NA)	(NA)
36	ELECTRIC, ELECTRONIC EQUIPMENT . .	141	80	35.4	269.9	26.6	52.1	169.3	680.9	520.1	1 186.8	36.1	(NA)	(NA)
361	ELECTRIC DISTRIBUTING EQUIPMENT. .	18	7	3.4	23.8	2.8	5.0	16.3	57.8	44.1	101.9	2.5	(NA)	(NA)
362	ELECTRICAL INDUSTRIAL APPARATUS. .	22	14	4.6	31.0	3.3	6.8	19.6	87.9	45.9	126.7	10.6	3.6	40.3
3621	MOTORS AND GENERATORS. . . . .	6	5	1.9	11.7	1.5	3.2	7.6	31.5	12.1	41.6	.9	2.2	20.6
3622	INDUSTRIAL CONTROLS. . . . .	10	6	1.6	11.2	1.0	2.0	6.5	39.4	17.2	51.0	(D)	■	(D)
363	HOUSEHOLD APPLIANCES . . . . .	13	10	4.6	27.8	4.1	7.9	21.8	84.8	83.2	169.1	2.2	5.5	66.1
364	ELECT. LIGHTING AND WIRING EQUIP. .	23	14	4.7	34.0	3.8	7.7	23.2	81.0	63.3	142.6	5.4	2.3	39.8
3643	CURRENT-CARRYING WIRING DEVICES. . .	13	8	2.7	17.1	2.3	4.6	13.3	34.5	20.4	53.7	(D)	CC	(D)
369	MISC. ELECTRICAL EQUIP., SUPPLIES.	25	12	2.8	21.5	2.3	4.7	16.0	82.9	51.5	132.8	1.9	BB	(D)
37	TRANSPORTATION EQUIPMENT . . . . .	126	47	8.8	61.0	7.0	13.7	41.9	189.4	165.8	325.7	6.1	(NA)	(NA)
371	MOTOR VEHICLES AND EQUIPMENT . . .	48	24	6.1	42.6	4.8	9.4	29.5	151.9	127.2	249.7	5.0	3.3	39.8
3714	MOTOR VEHICLE PARTS AND ACCESSORIES.	24	11	3.9	25.9	3.1	6.2	18.0	88.8	61.4	146.0	3.5	2.0	26.5
373	SHIP, BOAT BUILDING, REPAIRING . .	46	12	2.0	12.6	1.6	3.2	9.1	27.1	24.6	51.7	.4	1.3	11.7
379	MISC. TRANSPORTATION EQUIPMENT . .	24	8	.5	3.7	.4	.8	2.3	6.4	11.0	16.9	.4	(NA)	(NA)
38	INSTRUMENTS AND RELATED PRODUCTS	60	24	8.5	64.2	6.6	13.1	39.5	150.3	95.1	245.1	8.4	(NA)	(NA)
382	MEASURING AND CONTROLLING DEVICES.	10	6	3.2	25.5	2.2	4.8	14.6	55.9	19.5	73.5	2.3	(NA)	(NA)
384	MEDICAL INSTRUMENTS AND SUPPLIES .	24	9	2.7	17.3	2.4	4.6	12.2	24.6	31.6	55.4	2.9	1.0	8.3
39	TOYS AND SPORTING GOODS. . . . .	38	6	1.5	8.7	1.2	2.7	8.0	12.8	11.6	30.6	1.6	CC	(D)
393	PENS, PENCILS, OFFICE, ART GOODS . .	14	3	.4	2.2	.3	.6	1.4	5.7	6.1	11.8	.3	(NA)	(NA)
394	MISCELLANEOUS MANUFACTURES . . . .	117	24	2.9	19.4	2.3	4.7	12.7	50.6	28.5	76.0	2.3	1.9	15.3
3993	SIGNS AND ADVERTISING DISPLAYS . . .	47	7	.4	3.0	.3	.5	1.8	5.8	3.0	8.8	.3	.3	2.6
3994	MANUFACTURING INDUSTRIES, NEC. . .	43	9	1.8	13.6	1.5	3.1	8.3	36.4	16.6	50.6	1.5	1.1	8.6
--	ADMINISTRATIVE AND AUXILIARY . .	172	105	27.3	337.5	-	-	-	-	-	-	-	14.9	-

Notes: The following symbols indicate employment size range for 1967:

AA Less than 250 employees  
BB 250 to 499 employees  
CC 500 to 999 employees  
EE 1,000 to 2,499 employees  
FF 2,500 employees and over

- Represents zero. (NA) Not available. Because of a revision to this industry or industry group in the 1972 edition of the SIC manual, 1967 census data are not available on a comparable basis. (D) Withheld to avoid disclosing figures for individual companies.

<sup>1</sup>The total cost of materials and value of shipments for industry groups shown may include extensive duplication arising from shipments between establishments in the same industry classification. (For a more complete explanation, see appendix.)

<sup>2</sup>Includes figures for industry groups which have been withheld from publication in order to (a) avoid disclosing figures for individual companies or (b) permit further checking of figures for smaller industry groups. Additional detail will appear in the final report for this State.



## Appendix A. SCOPE AND COVERAGE

This report is one of a series presenting preliminary information, by State, from the 1972 Census of Manufactures. The data will be superseded in a final report which, in turn, will be included in *Volume III, Area Statistics, 1972 Census of Manufactures*. The final report will include a comprehensive discussion of the concepts and definitions used in the census.

The census of manufactures covers each manufacturing establishment in the United States with one paid employee or more; manufacturing establishments with no employees are excluded. Firms which operated more than one establishment were required to file a separate report for each location. Companies which engaged in distinctly different lines of activity at one location were asked to submit separate reports if the company records permitted such a separation and the activities were of significant size.

This report includes figures for administrative offices, warehouses, garages, or other auxiliary units which service manufacturing establishments.

In the 1972 census, the approximately 120,000 manufacturing establishments with fewer than 10 employees were excused from filing reports. Under special arrangements which safeguarded the confidentiality of both tax and census records, data on payrolls, sales, and industry classification from the administrative records of the Social Security Administration and the Internal Revenue Service were made available to the Census Bureau for use in the 1972 Economic Censuses (retail and wholesale trade, service industries, construction industries, manufactures, and mineral industries). Estimates for data other than payrolls and sales for these small establishments were constructed from industry averages. The effect on industry aggregates is slight in most industries. For manufacturing as a whole, these small establishments account for less than .3 percent of the payrolls and value added.

Establishments are classified by industry in accordance with industry definitions described in the 1972 edition of the Standard Industrial Classification (SIC) Manual. For 1972, the SIC was significantly revised and the comparability with prior year's data for some industries was significantly affected. The comparability at the 2- and 3-digit SIC levels was less affected. The final volumes of the 1972 Census of Manufactures will contain a table relating aggregates based on the 1972 SIC with aggregates derived from classifying establishments according to the 1967 SIC definitions.

As in earlier censuses, a number of small establishments may have been misclassified as to industry. However, such possible misclassifications have significant effect on *none* of the statistics except the number of establishments. As indicated above, report forms were not mailed to very small establishments (fewer than 10 employees). The industry classifications for these establishments were assigned on the basis of brief descriptions of the general activity of the establishment. Where the description is incomplete or there are relatively fine lines of demarcation among industries or between manufacturing and nonmanufacturing activity, the code assigned to an establishment could differ from that which would have been assigned on the basis of more complete product information. Therefore, the total establishment count for individual industries should be viewed as an approximation rather than a precise measurement. The counts for establishments with 20 employees or more are more reliable than the total number of establishments.

More detailed figures for this State will appear in the final census reports. Final reports will also include a comprehensive discussion of such concepts as "industry" and "establishment," as well as the various statistical items such as "employment," "value of shipments," and "value added." Similar preliminary and final reports will be issued for other States during the coming months. A series of preliminary summary reports showing U.S. totals for each manufacturing industry and for each State are being issued. Final industry reports and final area reports will be published during 1974.

Order forms describing the individual reports and listing their prices may be obtained from any U.S. Department of Commerce district office or from the Publications Distribution Section, Social and Economic Statistics Administration, Washington, D.C. 20233.

The 1972 Census of Manufactures is the 29th census of manufacturing establishments in the United States. For 1972, it was conducted jointly with the censuses of mineral industries, construction industries, retail trade, wholesale trade, and selected services under authority of Title 13 of the United States Code. Title 13 specifies that a census of manufactures be conducted every 5 years and, as amended, to cover years ending in "2" and "7". Title 13 also authorizes an annual sample survey of manufacturing establishments in interim years.



## Appendix B. EXPLANATION OF TERMS

*(For a more complete discussion of these terms and the method of compiling the Census of Manufactures, see the "Introduction" to the 1967 Census of Manufactures, Volume III).*

**All Employees**—All full-time and part-time employees on the payrolls of operating manufacturing establishments for any part of the pay period ending nearest the 12th of the months specified on the report form. Included are all persons on paid sick leave, paid holidays, and paid vacations during these pay periods. Officers of corporations are included as employees; proprietors and partners of unincorporated firms are excluded. The "all employee" number is the average number of production workers for the midmonth payroll period of March, May, August, and November plus the number of nonproduction employees in mid-March.

**Number of Production Workers**—Workers (up through the working foreman level) engaged in fabricating, processing, assembling, inspecting, receiving, packing, warehousing, shipping (but not delivering), and maintenance, repair, janitorial, and watchman services, product development, auxiliary production for plant's own use (e.g., powerplant), recordkeeping, and other closely associated services. Proprietors and partners are excluded.

**Payroll**—This item includes all forms of compensation such as salaries, wages, commissions, dismissal pay, bonuses, vacation and sick leave pay, and compensation in kind, prior to such deductions as employees' Social Security contributions, withholding taxes, group insurance, union dues, and savings bonds. The total includes salaries of officers of these establishments, if a corporation; it excludes payments to the proprietor or partners, if an unincorporated concern. Respondents were told that in reporting they could follow the definition of payrolls used for calculating the Federal withholding tax.

**Man-Hours of Production Workers**—This total relates to production-worker man-hours worked or paid for at the plant including actual overtime hours (not straight-time equivalent hours). It excludes hours paid for vacation, holidays, or sick leave when the employee was not at the plant.

**Cost of Materials**—The term "Cost of Materials" refers to charges actually paid or payable for items consumed or put into production during the year, including freight and other direct charges incurred by the establishment in acquiring these materials. It includes the cost of materials or fuel consumed regardless of

whether these items were purchased by the establishment from other companies, transferred to it from other establishments of the same company, or withdrawn from inventory during the year. The establishment was requested to value materials transferred from other parts of the company at its approximate market value, not at cost of production. The important components of this cost item are (a) all raw materials, semifinished goods, parts, components, containers, scrap, and supplies put into production or used as operating supplies and for repair and maintenance during the year; (b) electric energy purchased; (c) fuels consumed for heat, power, or the generation of electricity; (d) work done by others on materials or parts furnished by manufacturing establishments (contract work); and (e) products bought and resold in the same condition.

**Value of Shipments**—The value of shipments is the received or receivable net selling value, f.o.b. plant (exclusive of freight and taxes), of all products shipped, both primary and secondary, as well as all miscellaneous receipts such as receipts for contract work performed for others, installation and repair, sales of scrap, and sale of products bought and resold without further processing. Included are all items made by the establishment or for it under contract from materials owned by it whether sold, transferred to other plants of the same company, or shipped on consignment. The net selling value of products made in one plant on a contract basis from materials owned by another was reported by the plant providing the materials.

In the case of multiunit companies, the manufacturer was requested to report the value of products transferred to other establishments of the same company at full economic value; i.e., to include not only the direct costs of production but also a reasonable proportion of "all other costs" (including company overhead) and profit.

**Duplication in Cost of Materials and Value of Products**—The aggregate cost of materials and value-of-shipments figures for industry groups and for all manufacturing industries may include large amounts of duplication since the products of some industries are used as materials by others. With some important exceptions, such as motor vehicles and parts, this duplication is not significant within individual industries but arises from the addition of the totals of related industries in successive stages of the production of a finished manufactured product. Examples are the addition of flour mills to bakeries in the food group and the addition of pulp mills to paper mills in the paper and allied products group of industries. Esti-



mates of this duplication indicate that the value of manufactured products exclusive of such duplication—the value of finished manufactures—approximates two-thirds of the total value of products.

Prior to 1962, the Bureau of the Census did not publish figures for cost of materials or value of shipments if they contained significant duplication. Effective with the 1962 annual survey these figures were shown at all industry levels for the United States to meet the requests for their use in studies in which the presence of an indeterminate amount of duplication is not a limiting factor. However, they are appropriately footnoted. Effective with the 1964 annual survey, these industry group totals are also shown at the State, standard metropolitan statistical area, and large-county level.

Even where there is no significant amount of duplication, value-of-shipments figures are deficient as measures of the relative economic importance of individual manufacturing industries or geographic areas because of the wide variation in ratio of materials, labor, and other processing costs to value of shipments among industries.

**Value Added by Manufacture**—This measure of manufacturing activity is derived by subtracting the cost of materials, supplies, containers, fuel, purchased electricity, and cost of resales contract work from the value of shipments for products manufactured plus resales and receipts for services rendered. The result of this calculation is adjusted by the net change in finished goods and work-in-process inventories between the beginning and end of the year. (In the few industries that report value of production rather than value of shipments, only changes in work-in-process inventories are used to adjust value added. In the shipbuilding and repairing industry, no inventory adjustment is made.)

"Value added" avoids the duplication in the value of shipments figure which results from the use of products of some establishments as materials by others. Value added is considered to be the best value measure available for comparing the relative economic importance of manufacturing among industries and geographic areas.

**Expenditures for Plant and Equipment**—Manufacturing establishments in operation and establishments under construction but not yet in operation, were asked to report their expenditures for (a) permanent additions and major alterations to the manufacturing establishment, and (b) new machinery and equipment used for replacement purposes and additions to plant capacity if they are of the type for which depreciation accounts are ordinarily maintained.

These totals exclude expenditures for new facilities and equipment leased from nonmanufacturing concerns; new facilities owned by the Federal Government but operated under contract by private companies; and plant and equipment furnished to the manufacturer by communities and nonprofit organizations. Expenditures for used plant and equipment (although reported in the census), expenditures for land, and cost of maintenance and repairs charged as current operating expense are also omitted from the figures for new capital expenditures.

**Central Administrative Offices and Auxiliary Units**—In the 1972 census as in previous years, respondents were asked to file separate reports for central administrative offices or auxiliary units which were (1) at different locations from the establishments served or, (2) at the same location as one of these establishments but were not operated as an integral part thereof and served two or more establishments. The functions of employees in central administrative offices include general company policy determination, planning and management (that is, company purchasing, accounting, general engineering, direction of company personnel matters, and legal and patent matters). Auxiliaries are storage facilities, garages, repair shops, purchasing offices, sales promotion offices, and research laboratories serving the plants or central management of the company.

**Standard Metropolitan Statistical Areas**—Standard metropolitan statistical areas (SMSA) are integrated economic and social units with a large volume of daily travel and communication between the central city and outlying parts of the area.<sup>1</sup> Each area (except in New England) consists of one whole county or more. An area may contain not only highly industrialized counties but also adjoining counties which, though primarily residential in character, contribute significantly to the industrial counties' labor force and are socially and economically integrated with the central city. These areas are defined by the Federal Committee on Standard Metropolitan Statistical Areas of the Office of Management and Budget for general-purpose use throughout the Federal Government in presenting economic and social data. In the New England States, similar intergration criteria are applied in defining

<sup>1</sup> Each standard metropolitan statistical area must include either (1) a city with 50,000 or more inhabitants, or (2) a city having a population of at least 25,000 which (a) with the addition of the population of contiguous places has a population density of at least 1,000 persons per square mile; (b) constitutes, for general economic and social purposes, a single community with a combined population of at least 50,000; and (c) includes a total population of at least 75,000 in the county or counties in which the city and contiguous places are located.

SMSA's on a city and town basis because towns rather than counties are regarded as the significant unit in this region of the country.

The requirement that each SMSA consist of county units (except in New England) sometimes results in the inclusion in an area of considerable amount of territory which would not ordinarily be considered "metropolitan," much less "industrial." It is recognized that metropolitan areas could be more accurately defined in terms of smaller area segments such as minor civil

divisions, but the usefulness of areas so defined would be limited by the fact that many types of economic and social data are available only on a county basis.

Each SMSA is designated by the name of the principal city of the area. In addition to the name of the principal city, the area title may include one or two additional city names.

The data for SMSA's which changed definition since the 1967 census have not been retabulated on the new basis for years prior to 1972.



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# PRELIMINARY REPORT

# 1972 CENSUS OF MANUFACTURES

## AREA SERIES

72(P)-S35

ued April 1974

U. S. DEPARTMENT OF COMMERCE • Social and Economic Statistics Administration • BUREAU OF THE CENSUS

## North Dakota

Value added by manufacturing in 1972 in the State of North Dakota amounted to \$208 million, a 10-percent increase from 1971 and a 84-percent increase from 1967.

This report presents preliminary results from the 1972 Census of Manufactures for the State, its Standard Metropolitan Statistical Area, and its counties.

Data are provided for industry groups within the State. Historical data, back to 1958, are included for the State as a whole,

and 1967 figures on employment and value added are provided for the smaller areas.

The figures in this report have been subjected to only preliminary review and must be regarded as approximations of the final census figures. No adjustments have been made in the value figures for changes in price level.

For an explanation of the terms used in the tables, see the appendix at the end of this report.

TABLE 1. General Statistics for the State: 1972 and Earlier Years

(See appendix, Explanation of Terms)

Year	Establishments		All employees <sup>1</sup>		Production workers			Value added by manufacture	Cost of materials <sup>2</sup>	Value of shipments <sup>2</sup>	Capital expenditures, new
	Total	With 20 employees or more	Number	Payroll	Number	Man-hours	Wages				
	(number)	(number)	(1,000)	(million dollars)	(1,000)	(millions)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(million dollars)
NORTH DAKOTA											
1972 Census .....	477	111	9.9	76.4	6.9	14.2	47.3	207.5	376.1	589.4	13.2
1971 ASM .....	(NA)	(NA)	10.1	70.3	6.9	14.5	42.9	189.0	349.8	536.1	11.3
1970 ASM .....	(NA)	(NA)	10.3	73.5	7.3	14.8	46.1	188.8	310.3	494.3	10.1
1969 ASM .....	(NA)	(NA)	8.3	50.4	5.6	11.4	32.9	144.5	268.1	408.4	13.6
1968 ASM .....	(NA)	(NA)	7.9	46.0	5.5	10.0	28.7	143.9	266.5	409.3	6.1
1967 Census .....	454	92	7.5	41.6	5.2	10.7	26.1	112.8	255.5	365.4	6.3
1966 ASM .....	(NA)	(NA)	6.7	37.2	4.5	9.3	21.0	100.9	221.2	318.8	7.1
1965 ASM .....	(NA)	(NA)	6.5	34.0	4.5	9.2	21.0	97.3	204.5	294.2	11.2
1964 ASM .....	(NA)	(NA)	6.5	31.7	4.5	9.0	19.8	71.6	195.8	267.1	17.0
1963 Census .....	459	78	6.5	31.5	4.5	9.1	19.8	72.4	(NA)	(NA)	8.1
1962 ASM .....	(NA)	(NA)	6.0	26.5	4.3	8.7	16.8	55.4	(NA)	(NA)	2.9
1961 ASM .....	(NA)	(NA)	6.0	26.0	4.3	8.8	16.2	61.2	(NA)	(NA)	3.7
1960 ASM .....	(NA)	(NA)	6.0	25.1	4.2	8.5	15.8	59.6	(NA)	(NA)	2.4
1959 ASM .....	(NA)	(NA)	6.2	26.5	4.3	8.8	17.1	59.2	(NA)	(NA)	2.7
1958 Census .....	405	79	6.3	26.2	4.4	8.8	17.0	62.6	(NA)	(NA)	9.1

Note: "ASM" data are based on a representative sample of manufacturing establishments canvassed in the Annual Survey of Manufactures. These estimates may differ from the results of a complete canvass of all manufacturing establishments. The standard errors associated with these estimates are published in the annual survey of manufactures volumes for this period. For comparative purposes, the 1972 ASM estimate for the State of North Dakota was 11 thousand employees, and \$207 million in value added with corresponding standard error of estimate of 16 and 16.

(NA) Not available.

<sup>1</sup>Includes employment and payroll at central administrative offices and auxiliary units. (For a definition of these units, see appendix.)

<sup>2</sup>The total cost of materials and value of shipments may include extensive duplication arising from shipments between establishments in the same industry classification. (For a more complete explanation, see appendix.)

TABLE 2. General Statistics for the State, Standard Metropolitan Statistical Areas, and Counties: 1972 and 1967

(See appendix, Explanation of Terms)

State, standard metropolitan statistical areas, and counties <sup>1</sup>	1972											1967	
	Establishments		All employees <sup>2</sup>		Production workers			Value added by manufacture	Cost of materials <sup>3</sup>	Value of shipments <sup>3</sup>	Capital expenditures, new	All employees	Value added by manufacture
	Total	With 20 employees or more	Number	Payroll	Number	Man-hours	Wages						
	(number)	(number)	(1,000)	(million dollars)	(1,000)	(million)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(1,000)	(million dollars)
NORTH DAKOTA, TOTAL . . . . .	477	111	9.9	76.4	6.9	14.2	47.3	207.5	376.1	589.4	13.2	7.5	112.8
STANDARD METROPOLITAN STATISTICAL AREAS <sup>4</sup>													
FARGO-MOORHEAD . . . . .	113	33	3.3	27.4	2.4	4.8	17.6	60.1	131.5	191.2	2.4	2.5	31.6
PORTION IN MINNESOTA . . . . .	27	5	1.1	8.7	.9	1.7	6.0	21.5	27.4	48.9	.7	.7	11.5
PORTION IN NORTH DAKOTA . . . . .	86	28	2.2	18.7	1.5	3.1	11.6	38.6	104.1	142.3	1.7	1.8	20.1
COUNTIES													
BURLEIGH . . . . .	30	11	1.0	5.9	.5	1.0	3.1	12.6	9.6	22.1	1.1	.9	7.7
CASS . . . . .	86	28	2.2	18.7	1.5	3.1	11.6	38.6	104.1	142.3	1.7	1.8	20.1
GRAND FORKS . . . . .	39	12	1.4	10.2	1.0	2.2	6.6	19.2	33.7	52.9	2.9	.9	10.9
RICHLAND . . . . .	13	6	.3	1.9	.2	.4	1.3	3.2	3.4	6.5	.4	.1	1.4
WARD . . . . .	33	10	.6	5.0	.4	.7	2.5	10.0	10.9	20.7	.8	.6	6.5
WILLIAMS . . . . .	24	4	.3	2.0	.2	.4	1.2	4.9	16.1	20.9	.3	.4	3.7

<sup>1</sup>Some counties were withheld from publication in order to (a) avoid disclosing figures for individual companies or (b) permit further checking of the figures for smaller counties. Additional detail will appear in the final report for this State.

<sup>2</sup>Includes employment and payroll at central administrative offices and auxiliary units. (For a definition of these units, see appendix.)

<sup>3</sup>The total cost of materials and value of shipments may include extensive duplication arising from shipments between establishments in the same industry classification. (For a more complete explanation, see appendix.)

<sup>4</sup>The standard metropolitan statistical area in this State is defined as follows:

FARGO-MOORHEAD, ND-MN, SMSA: Consists of Cass County, ND, and Clay County, MN.

TABLE 3. General Statistics for the State, by Industry Groups and Industries: 1972 and 1967

(See appendix, Explanation of Terms)

Code	Industry	1972											1967	
		Establishments		All employees		Production workers			Value added by manufacture	Cost of materials <sup>1</sup>	Value of shipments <sup>1</sup>	Capital expenditures, new	All employees	Value added by manufacture
		Total	With 20 employees or more	Number	Payroll	Number	Man-hours	Wages						
		(number)	(number)	(1,000)	(million dollars)	(1,000)	(million)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(1,000)	(million dollars)
	ALL INDUSTRIES, TOTAL <sup>2</sup> . . . . .	477	111	9.9	76.4	6.9	14.2	47.3	207.5	376.1	589.4	13.2	7.5	112.8
20	FOOD AND KINDRED PRODUCTS . . . . .	132	41	3.6	26.8	2.3	5.2	15.5	66.5	190.0	258.4	5.2	3.2	39.9
201	MEAT PRODUCTS . . . . .	15	5	.3	2.9	.2	.5	2.1	5.4	62.5	68.2	.1	.5	3.1
202	DAIRY PRODUCTS . . . . .	54	13	.9	6.9	.5	1.1	3.4	16.5	60.4	76.6	1.4	1.0	11.6
2026	FLUID MILK . . . . .	19	9	.6	5.1	.3	.6	2.1	10.7	35.0	45.8	.8	BB	(D)
204	GRAIN MILL PRODUCTS . . . . .	16	5	.3	2.6	.2	.5	1.4	5.6	25.1	31.4	1.1	.4	6.1
208	BEVERAGES . . . . .	11	6	.3	1.9	.1	.2	.5	3.7	4.9	8.6	.1	.2	2.9
2086	BOTTLED AND CANNED SOFT DRINKS . . . . .	11	6	.3	1.9	.1	.2	.5	3.7	4.9	8.6	.1	.2	2.9
24	LUMBER AND WOOD PRODUCTS . . . . .	16	5	.4	2.6	.3	.7	2.1	13.2	8.0	21.1	.3	(NA)	(NA)
27	PRINTING AND PUBLISHING . . . . .	114	19	1.4	10.3	.9	1.6	6.1	19.1	6.0	25.1	1.9	1.5	14.6
2711	NEWSPAPERS . . . . .	68	6	.9	6.9	.5	.9	3.9	13.7	2.8	16.5	1.3	1.2	11.7
275	COMMERCIAL PRINTING . . . . .	36	10	.5	2.8	.3	.6	1.8	4.6	2.8	7.4	.4	(NA)	(NA)
2752	COMMERCIAL PRINTING, LITHOGRAPHIC . . . . .	17	8	.4	1.8	.3	.5	1.3	2.7	1.6	4.3	.3	(NA)	(NA)
32	STONE, CLAY, AND GLASS PRODUCTS . . . . .	65	15	1.0	7.0	.7	1.3	5.2	20.4	12.0	32.1	1.8	.5	5.8
3273	READY-MIXED CONCRETE . . . . .	35	8	.4	2.5	.2	.4	1.4	5.9	5.8	11.7	.9	.2	3.1
35	MACHINERY, EXCEPT ELECTRICAL . . . . .	55	11	1.8	16.0	1.3	2.8	9.3	39.6	37.1	76.1	2.1	1.1	11.8
39	MISC. MANUFACTURING INDUSTRIES . . . . .	19	4	.3	2.1	.3	.5	1.4	2.8	1.6	4.4	.3	.2	1.6

Note: The following symbols indicate employment size range for 1967:

AA less than 250 employees      EE 1,000 to 2,499 employees  
BB 250 to 499 employees      FF 2,500 employees and over  
CC 500 to 999 employees

(NA) Not available. Because of a revision to this industry or industry group in the 1972 edition of the SIC manual, 1967 census data are not available on a comparable basis.

(D) Withheld to avoid disclosing figures for individual companies.

<sup>1</sup>The total cost of materials and value of shipments for industry groups shown may include extensive duplication arising from shipments between establishments in the same industry classification. (For a more complete explanation, see appendix.)

<sup>2</sup>Includes figures for industry groups which have been withheld from publication in order to (a) avoid disclosing figures for individual companies or (b) permit further checking of figures for smaller industry groups. Additional detail will appear in the final report for this State.



## Appendix A. SCOPE AND COVERAGE

This report is one of a series presenting preliminary information, by State, from the 1972 Census of Manufactures. The data will be superseded in a final report which, in turn, will be included in *Volume III, Area Statistics, 1972 Census of Manufactures*. The final report will include a comprehensive discussion of the concepts and definitions used in the census.

The census of manufactures covers each manufacturing establishment in the United States with one paid employee or more; manufacturing establishments with no employees are excluded. Firms which operated more than one establishment were required to file a separate report for each location. Companies which engaged in distinctly different lines of activity at one location were asked to submit separate reports if the company records permitted such a separation and the activities were of significant size.

This report includes figures for administrative offices, warehouses, garages, or other auxiliary units which service manufacturing establishments.

In the 1972 census, the approximately 120,000 manufacturing establishments with fewer than 10 employees were excused from filing reports. Under special arrangements which safeguarded the confidentiality of both tax and census records, data on payrolls, sales, and industry classification from the administrative records of the Social Security Administration and the Internal Revenue Service were made available to the Census Bureau for use in the 1972 Economic Censuses (retail and wholesale trade, service industries, construction industries, manufactures, and mineral industries). Estimates for data other than payrolls and sales for these small establishments were constructed from industry averages. The effect on industry aggregates is slight in most industries. For manufacturing as a whole, these small establishments account for less than 3 percent of the payrolls and value added.

Establishments are classified by industry in accordance with industry definitions described in the 1972 edition of the Standard Industrial Classification (SIC) Manual. For 1972, the SIC was significantly revised and the comparability with prior year's data for some industries was significantly affected. The comparability at the 2- and 3-digit SIC levels was less affected. The final volumes of the 1972 Census of Manufactures will contain a table relating aggregates based on the 1972 SIC with aggregates derived from classifying establishments according to the 1967 SIC definitions.

As in earlier censuses, a number of small establishments may have been misclassified as to industry. However, such possible misclassifications have significant effect on *none* of the statistics except the number of establishments. As indicated above, report forms were not mailed to very small establishments (fewer than 10 employees). The industry classifications for these establishments were assigned on the basis of brief descriptions of the general activity of the establishment. Where the description is incomplete or there are relatively fine lines of demarcation among industries or between manufacturing and nonmanufacturing activity, the code assigned to an establishment could differ from that which would have been assigned on the basis of more complete product information. Therefore, the total establishment count for individual industries should be viewed as an approximation rather than a precise measurement. The counts for establishments with 20 employees or more are more reliable than the total number of establishments.

More detailed figures for this State will appear in the final census reports. Final reports will also include a comprehensive discussion of such concepts as "industry" and "establishment," as well as the various statistical items such as "employment," "value of shipments," and "value added." Similar preliminary and final reports will be issued for other States during the coming months. A series of preliminary summary reports showing U.S. totals for each manufacturing industry and for each State are being issued. Final industry reports and final area reports will be published during 1974.

Order forms describing the individual reports and listing their prices may be obtained from any U.S. Department of Commerce district office or from the Publications Distribution Section, Social and Economic Statistics Administration, Washington, D.C. 20233.

The 1972 Census of Manufactures is the 29th census of manufacturing establishments in the United States. For 1972, it was conducted jointly with the censuses of mineral industries, construction industries, retail trade, wholesale trade, and selected services under authority of Title 13 of the United States Code. Title 13 specifies that a census of manufactures be conducted every 5 years and, as amended, to cover years ending in "2" and "7". Title 13 also authorizes an annual sample survey of manufacturing establishments in interim years.



## Appendix B. EXPLANATION OF TERMS

*(For a more complete discussion of these terms and the method of compiling the Census of Manufactures, see the "Introduction" to the 1967 Census of Manufactures, Volume III).*

**All Employees**—All full-time and part-time employees on the payrolls of operating manufacturing establishments for any part of the pay period ending nearest the 12th of the months specified on the report form. Included are all persons on paid sick leave, paid holidays, and paid vacations during these pay periods. Officers of corporations are included as employees; proprietors and partners of unincorporated firms are excluded. The "all employee" number is the average number of production workers for the midmonth payroll period of March, May, August, and November plus the number of nonproduction employees in mid-March.

**Number of Production Workers**—Workers (up through the working foreman level) engaged in fabricating, processing, assembling, inspecting, receiving, packing, warehousing, shipping (but not delivering), and maintenance, repair, janitorial, and watchman services, product development, auxiliary production for plant's own use (e.g., powerplant), recordkeeping, and other closely associated services. Proprietors and partners are excluded.

**Payroll**—This item includes all forms of compensation such as salaries, wages, commissions, dismissal pay, bonuses, vacation and sick leave pay, and compensation in kind, prior to such deductions as employees' Social Security contributions, withholding taxes, group insurance, union dues, and savings bonds. The total includes salaries of officers of these establishments, if a corporation; it excludes payments to the proprietor or partners, if an unincorporated concern. Respondents were told that in reporting they could follow the definition of payrolls used for calculating the Federal withholding tax.

**Man-Hours of Production Workers**—This total relates to production-worker man-hours worked or paid for at the plant including actual overtime hours (not straight-time equivalent hours). It excludes hours paid for vacation, holidays, or sick leave when the employee was not at the plant.

**Cost of Materials**—The term "Cost of Materials" refers to charges actually paid or payable for items consumed or put into production during the year, including freight and other direct charges incurred by the establishment in acquiring these materials. It includes the cost of materials or fuel consumed regardless of

whether these items were purchased by the establishment from other companies, transferred to it from other establishments of the same company, or withdrawn from inventory during the year. The establishment was requested to value materials transferred from other parts of the company at its approximate market value, not at cost of production. The important components of this cost item are (a) all raw materials, semifinished goods, parts, components, containers, scrap, and supplies put into production or used as operating supplies and for repair and maintenance during the year; (b) electric energy purchased; (c) fuels consumed for heat, power, or the generation of electricity; (d) work done by others on materials or parts furnished by manufacturing establishments (contract work); and (e) products bought and resold in the same condition.

**Value of Shipments**—The value of shipments is the received or receivable net selling value, f.o.b. plant (exclusive of freight and taxes), of all products shipped, both primary and secondary, as well as all miscellaneous receipts such as receipts for contract work performed for others, installation and repair, sales of scrap, and sale of products bought and resold without further processing. Included are all items made by the establishment or for it under contract from materials owned by it whether sold, transferred to other plants of the same company, or shipped on consignment. The net selling value of products made in one plant on a contract basis from materials owned by another was reported by the plant providing the materials.

In the case of multiunit companies, the manufacturer was requested to report the value of products transferred to other establishments of the same company at full economic value; i.e., to include not only the direct costs of production but also a reasonable proportion of "all other costs" (including company overhead) and profit.

**Duplication in Cost of Materials and Value of Products**—The aggregate cost of materials and value-of-shipments figures for industry groups and for all manufacturing industries may include large amounts of duplication since the products of some industries are used as materials by others. With some important exceptions, such as motor vehicles and parts, this duplication is not significant within individual industries but arises from the addition of the totals of related industries in successive stages of the production of a finished manufactured product. Examples are the addition of flour mills to bakeries in the food group and the addition of pulp mills to paper mills in the paper and allied products group of industries. Esti-



mates of this duplication indicate that the value of manufactured products exclusive of such duplication—the value of finished manufactures—approximates two-thirds of the total value of products.

Prior to 1962, the Bureau of the Census did not publish figures for cost of materials or value of shipments if they contained significant duplication. Effective with the 1962 annual survey these figures were shown at all industry levels for the United States to meet the requests for their use in studies in which the presence of an indeterminate amount of duplication is not a limiting factor. However, they are appropriately footnoted. Effective with the 1964 annual survey, these industry group totals are also shown at the State, standard metropolitan statistical area, and large-county level.

Even where there is no significant amount of duplication, value-of-shipments figures are deficient as measures of the relative economic importance of individual manufacturing industries or geographic areas because of the wide variation in ratio of materials, labor, and other processing costs to value of shipments among industries.

**Value Added by Manufacture**—This measure of manufacturing activity is derived by subtracting the cost of materials, supplies, containers, fuel, purchased electricity, and cost of resales contract work from the value of shipments for products manufactured plus resales and receipts for services rendered. The result of this calculation is adjusted by the net change in finished goods and work-in-process inventories between the beginning and end of the year. (In the few industries that report value of production rather than value of shipments, only changes in work-in-process inventories are used to adjust value added. In the shipbuilding and repairing industry, no inventory adjustment is made.)

“Value added” avoids the duplication in the value of shipments figure which results from the use of products of some establishments as materials by others. Value added is considered to be the best value measure available for comparing the relative economic importance of manufacturing among industries and geographic areas.

**Expenditures for Plant and Equipment**—Manufacturing establishments in operation and establishments under construction but not yet in operation, were asked to report their expenditures for (a) permanent additions and major alterations to the manufacturing establishment, and (b) new machinery and equipment used for replacement purposes and additions to plant capacity if they are of the type for which depreciation accounts are ordinarily maintained.

These totals exclude expenditures for new facilities and equipment leased from nonmanufacturing concerns; new facilities owned by the Federal Government but operated under contract by private companies; and plant and equipment furnished to the manufacturer by communities and nonprofit organizations. Expenditures for used plant and equipment (although reported in the census), expenditures for land, and cost of maintenance and repairs charged as current operating expense are also omitted from the figures for new capital expenditures.

**Central Administrative Offices and Auxiliary Units**—In the 1972 census as in previous years, respondents were asked to file separate reports for central administrative offices or auxiliary units which were (1) at different locations from the establishments served or, (2) at the same location as one of these establishments but were not operated as an integral part thereof and served two or more establishments. The functions of employees in central administrative offices include general company policy determination, planning and management (that is, company purchasing, accounting, general engineering, direction of company personnel matters, and legal and patent matters). Auxiliaries are storage facilities, garages, repair shops, purchasing offices, sales promotion offices, and research laboratories serving the plants or central management of the company.

**Standard Metropolitan Statistical Areas**—Standard metropolitan statistical areas (SMSA) are integrated economic and social units with a large volume of daily travel and communication between the central city and outlying parts of the area.<sup>1</sup> Each area (except in New England) consists of one whole county or more. An area may contain not only highly industrialized counties but also adjoining counties which, though primarily residential in character, contribute significantly to the industrial counties' labor force and are socially and economically integrated with the central city. These areas are defined by the Federal Committee on Standard Metropolitan Statistical Areas of the Office of Management and Budget for general-purpose use throughout the Federal Government in presenting economic and social data. In the New England States, similar intergration criteria are applied in defining

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<sup>1</sup> Each standard metropolitan statistical area must include either (1) a city with 50,000 or more inhabitants, or (2) a city having a population of at least 25,000 which (a) with the addition of the population of contiguous places has a population density of at least 1,000 persons per square mile; (b) constitutes, for general economic and social purposes, a single community with a combined population of at least 50,000; and (c) includes a total population of at least 75,000 in the county or counties in which the city and contiguous places are located.

SMSA's on a city and town basis because towns rather than counties are regarded as the significant unit in this region of the country.

The requirement that each SMSA consist of county units (except in New England) sometimes results in the inclusion in an area of considerable amount of territory which would not ordinarily be considered "metropolitan," much less "industrial." It is recognized that metropolitan areas could be more accurately defined in terms of smaller area segments such as minor civil

divisions, but the usefulness of areas so defined would be limited by the fact that many types of economic and social data are available only on a county basis.

Each SMSA is designated by the name of the principal city of the area. In addition to the name of the principal city, the area title may include one or two additional city names.

The data for SMSA's which changed definition since the 1967 census have not been retabulated on the new basis for years prior to 1972.



# THE 1972 ECONOMIC CENSUSES

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# 1972 CENSUS OF MANUFACTURES

## AREA SERIES

MC72(P)-S36

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Issued April 1974

### Ohio

Value added by manufacturing in 1972 in the State of Ohio amounted to \$26,911 million, a 12-percent increase from 1971 and a 32-percent increase from 1967.

This report presents preliminary results from the 1972 Census of Manufactures for the State, its Standard Metropolitan Statistical Areas, and its counties.

Data are provided for industry groups within the State. Historical data, back to 1958, are included for the State as a whole,

and 1967 figures on employment and value added are provided for the smaller areas.

The figures in this report have been subjected to only preliminary review and must be regarded as approximations of the final census figures. No adjustments have been made in the value figures for changes in price level.

For an explanation of the terms used in the tables, see the appendix at the end of this report.

TABLE 1. General Statistics for the State: 1972 and Earlier Years

(See appendix, Explanation of Terms)

Year	Establishments		All employees <sup>1</sup>		Production workers			Value added by manufacture	Cost of materials <sup>2</sup>	Value of shipments <sup>2</sup>	Capital expenditures, new
	Total	With 20 employees or more	Number	Payroll	Number	Man-hours	Wages				
	(number)	(number)	(1,000)	(million dollars)	(1,000)	(millions)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(million dollars)
OHIO											
1972 Census .....	16,215	6,383	1,333.9	13,632.5	933.0	1,873.9	8,655.4	26,910.6	28,392.0	54,738.0	1,579.5
1971 ASM .....	(NA)	(NA)	1,331.5	12,512.9	922.3	1,819.3	7,796.1	23,991.7	25,920.7	50,142.4	1,310.2
1970 ASM .....	(NA)	(NA)	1,407.0	12,289.1	982.9	1,951.0	7,723.3	23,141.0	24,220.8	47,149.8	1,705.7
1969 ASM .....	(NA)	(NA)	1,468.9	12,419.4	1,048.1	2,142.2	8,019.8	24,192.6	25,275.0	49,054.5	1,975.1
1968 ASM .....	(NA)	(NA)	1,430.8	11,455.7	1,018.7	2,076.7	7,371.6	22,151.1	23,748.7	45,747.5	1,756.9
1967 Census .....	15,428	6,285	1,397.0	10,523.1	998.1	2,014.5	6,745.4	20,435.4	21,589.5	41,845.3	1,694.1
1966 ASM .....	(NA)	(NA)	1,411.1	10,376.1	1,016.5	2,116.7	6,807.8	20,132.1	22,034.1	41,644.9	1,585.8
1965 ASM .....	(NA)	(NA)	1,333.8	9,437.3	962.1	1,993.9	6,193.1	18,358.8	20,158.0	38,280.0	1,332.0
1964 ASM .....	(NA)	(NA)	1,260.1	8,579.1	902.2	1,857.0	5,582.9	16,477.0	18,350.5	34,594.8	1,085.0
1963 Census .....	15,484	5,800	1,239.8	8,125.4	885.7	1,799.7	5,257.2	15,506.1	(NA)	(NA)	847.8
1962 ASM .....	(NA)	(NA)	1,225.0	7,694.4	880.8	1,770.5	5,005.1	14,579.8	(NA)	(NA)	776.5
1961 ASM .....	(NA)	(NA)	1,192.3	7,212.6	847.2	1,678.8	4,602.8	13,306.8	(NA)	(NA)	752.3
1960 ASM .....	(NA)	(NA)	1,268.7	7,479.8	912.6	1,809.4	4,860.7	13,830.0	(NA)	(NA)	806.1
1959 ASM .....	(NA)	(NA)	1,268.0	7,382.9	918.5	1,847.4	4,835.8	13,856.8	(NA)	(NA)	678.3
1958 Census .....	15,203	5,534	1,201.0	6,522.5	856.5	1,658.5	4,170.2	11,472.5	(NA)	(NA)	795.8

Note: "ASM" data are based on a representative sample of manufacturing establishments canvassed in the Annual Survey of Manufactures. These estimates may differ from the results of a complete canvass of all manufacturing establishments. The standard errors associated with these estimates are published in the annual survey of manufactures volumes for this period. For comparative purposes, the 1972 ASM estimate for the State of Ohio was 1,327 thousand employees, and \$27,129 million in value added with corresponding standard error of estimate of 1 and 1.

(NA) Not available.

<sup>1</sup>Includes employment and payroll at central administrative offices and auxiliary units. (For a definition of these units, see appendix.)

<sup>2</sup>The total cost of materials and value of shipments may include extensive duplication arising from shipments between establishments in the same industry classification. (For a more complete explanation, see appendix.)

TABLE 2. General Statistics for the State, Standard Metropolitan Statistical Areas, and Counties: 1972 and 1967

(See appendix, Explanation of Terms)

State, standard metropolitan statistical areas, and counties <sup>1</sup>	1972											1967	
	Establishments		All employees <sup>2</sup>		Production workers			Value added by manufac- ture	Cost of materials <sup>3</sup>	Value of shipments <sup>3</sup>	Capital expendi- tures, new	All employees	Value added by manufac- ture
	Total	With 20 employees or more	Number	Payroll	Number	Man-hours	Wages						
	(number)	(number)	(1,000)	(million dollars)	(1,000)	(million)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(1,000)	(million dollars)
OHIO, TOTAL. . . . .	16 215	6 383	1 333.9	13 632.5	933.0	1 873.9	8 655.4	26 910.6	28 392.0	54 738.0	1 579.5	1 397.0	20 435.4
STANDARD METROPOLITAN STATISTICAL AREAS <sup>4</sup>													
AKRON. . . . .	968	374	91.1	964.8	54.9	110.5	540.6	1 678.8	1 533.7	3 194.4	108.1	101.1	1 400.8
CANTON . . . . .	577	219	58.5	579.4	43.2	83.6	393.7	1 163.5	1 214.9	2 367.3	139.0	63.6	909.3
CINCINNATI . . . . .	2 026	847	157.6	1 607.9	97.6	196.4	852.9	3 593.8	3 090.3	6 657.0	166.8	166.9	2 704.1
PORTION IN OHIO . . . . .	1 806	761	143.6	1 479.4	87.3	175.3	769.3	3 254.4	2 815.5	6 045.6	156.5	154.8	2 689.5
PORTION IN INDIANA . . . . .	29	11	3.9	36.8	3.3	6.7	28.7	159.1	70.9	229.4	3.1	3.4	118.8
PORTION IN KENTUCKY . . . . .	191	75	10.1	91.7	7.0	14.4	54.9	180.3	203.9	382.0	7.2	8.7	93.7
CLEVELAND . . . . .	4 329	1 598	267.4	2 872.7	177.6	361.8	1 709.5	5 054.8	5 023.9	9 985.3	253.6	306.7	4 297.0
COLUMBUS . . . . .	1 184	486	101.2	959.2	68.5	134.0	576.4	1 976.8	1 667.5	3 606.5	106.3	93.4	1 293.4
DAYTON . . . . .	1 129	440	113.1	1 245.0	78.1	158.9	813.5	2 186.2	1 742.9	3 893.5	107.7	126.3	1 928.4
HAMILTON-MIDDLETOWN . . . . .	205	91	29.2	324.1	20.5	43.8	211.6	587.9	607.7	1 183.1	35.5	29.5	436.1
HUNTINGTON-ASHLAND . . . . .	279	116	25.1	247.2	19.0	37.2	175.5	537.5	918.7	1 450.7	20.0	22.7	327.7
PORTION IN OHIO . . . . .	39	16	3.0	31.1	2.5	5.1	24.7	74.9	71.9	145.9	4.5	4.1	75.7
PORTION IN WEST VIRGINIA . . . . .	172	73	14.0	125.7	10.8	20.9	88.8	230.0	338.6	565.2	8.2	14.8	197.9
PORTION IN KENTUCKY . . . . .	111	27	8.1	90.4	5.7	11.2	62.0	232.6	508.2	739.6	7.3	3.8	54.1
LIMA . . . . .	309	125	28.0	271.7	21.6	44.6	193.9	652.8	932.2	1 567.7	52.1	27.9	427.4
LORAIN-ELYRIA . . . . .	304	108	35.8	408.9	27.2	56.9	291.6	1 022.7	1 666.2	2 657.8	56.8	33.8	533.8
MANSFIELD . . . . .	198	77	23.2	233.0	17.5	35.2	161.7	503.7	454.4	943.5	16.8	23.6	385.6
PARKERSBURG-MARIETTA . . . . .	170	76	18.0	174.1	12.6	25.3	108.4	478.8	365.1	838.1	34.5	(NA)	(NA)
PORTION IN OHIO . . . . .	76	30	5.9	55.9	4.1	8.0	35.7	136.1	162.0	295.6	9.2	(NA)	(NA)
PORTION IN WEST VIRGINIA . . . . .	94	46	12.1	118.2	8.5	17.3	72.7	342.7	203.1	542.5	25.3	(NA)	(NA)
SPRINGFIELD . . . . .	243	107	19.8	183.3	15.3	30.0	130.0	387.8	566.7	961.3	12.5	22.3	284.3
STEUBENVILLE-WEIRTON . . . . .	128	66	28.9	326.5	23.1	45.7	247.7	703.0	797.2	1 485.5	77.0	28.4	504.2
PORTION IN OHIO . . . . .	60	24	9.1	102.8	7.2	14.4	80.8	261.0	343.6	594.1	10.9	10.1	182.5
PORTION IN WEST VIRGINIA . . . . .	68	42	19.8	223.7	15.9	31.3	166.9	442.0	453.6	891.4	66.1	18.3	321.7
TOLEDO . . . . .	1 176	446	92.5	998.7	64.4	129.7	625.5	1 949.8	2 263.4	4 186.8	139.7	77.7	1 200.8
PORTION IN OHIO . . . . .	1 058	403	84.2	896.9	58.2	116.0	557.2	1 760.0	2 074.2	3 812.9	118.2	70.6	1 079.8
PORTION IN MICHIGAN . . . . .	118	43	8.3	101.8	6.2	13.7	68.3	189.8	189.2	373.9	21.5	7.1	121.0
WHEELING . . . . .	184	75	14.8	134.5	11.0	22.0	92.8	264.1	366.4	627.0	22.6	16.3	196.6
PORTION IN OHIO . . . . .	74	26	5.0	44.5	3.9	7.6	33.5	69.8	160.7	228.1	2.9	4.9	46.2
PORTION IN WEST VIRGINIA . . . . .	110	49	9.8	90.0	7.1	14.4	59.3	194.3	205.7	398.9	19.7	11.5	150.4
YOUNGSTOWN-WARREN . . . . .	593	246	87.2	947.3	68.9	134.8	706.3	1 711.7	2 694.5	4 305.2	95.9	82.9	1 260.5
COUNTIES													
ADAMS . . . . .	24	4	.6	4.2	.5	1.1	2.7	11.1	13.2	23.0	.9	.3	2.7
ALLEN . . . . .	168	63	15.2	156.4	11.5	23.7	111.2	385.1	609.6	982.9	35.4	16.4	244.6
ASHLAND . . . . .	74	30	6.9	56.0	5.4	10.7	38.6	121.3	103.7	218.7	5.4	6.0	70.1
ASHTABULA . . . . .	159	75	11.6	101.4	8.9	17.7	72.8	207.3	200.0	403.4	13.3	11.0	174.5
ATHENS . . . . .	37	11	1.8	14.7	1.3	2.5	10.4	38.9	34.3	73.1	1.9	2.2	26.6
AUGLAIZE . . . . .	60	31	5.8	51.7	4.4	9.1	35.8	100.4	119.0	218.1	10.4	5.3	72.7
BELMONT . . . . .	74	26	5.0	44.5	3.9	7.6	33.5	69.8	160.7	228.1	2.9	4.9	46.2
BROWN . . . . .	21	5	.7	3.9	.6	1.2	3.1	11.5	9.4	20.8	.2	.5	5.5
BUTLER . . . . .	205	91	29.2	324.1	20.5	43.8	211.6	587.9	607.7	1 183.1	35.5	29.5	436.1
CARROLL . . . . .	28	16	1.2	9.7	.9	1.8	6.2	20.6	21.3	41.5	1.7	1.1	12.7
CHAMPAIGN . . . . .	42	19	3.0	23.7	2.5	5.2	18.0	71.6	49.5	121.5	2.6	2.9	50.6
CLARK . . . . .	201	88	16.8	159.5	12.8	24.8	112.0	316.2	517.2	839.8	9.9	19.4	233.7
CLERMONT . . . . .	70	23	2.2	17.4	1.4	2.7	8.5	54.6	28.2	78.3	3.6	1.1	8.7
CLINTON . . . . .	48	23	3.0	23.2	2.5	4.9	17.3	54.3	40.4	93.6	3.5	2.8	44.1
COLUMBIANA . . . . .	202	71	10.0	82.1	7.8	14.9	57.7	137.5	111.0	248.2	9.6	10.3	121.0
COSHOCTON . . . . .	70	25	5.6	50.2	4.0	8.4	32.9	117.1	123.4	237.2	4.9	5.4	69.7
CRAWFORD . . . . .	96	42	10.6	97.0	6.9	13.8	56.4	189.2	185.6	368.0	9.7	11.0	141.3
CUYAHOGA . . . . .	3 674	1 361	232.3	2 549.2	153.6	313.8	1 516.2	4 465.0	4 493.6	8 879.9	215.9	277.3	3 911.7
DARKE . . . . .	68	27	3.0	23.1	2.4	4.9	17.4	59.7	55.0	112.4	(0)	2.6	34.1
DEFIANCE . . . . .	45	22	7.3	92.3	6.0	13.4	75.4	154.4	146.2	299.5	12.6	6.6	107.2
DELAWARE . . . . .	63	27	4.3	37.3	3.2	6.2	24.1	95.0	93.7	183.3	7.4	3.6	58.9
ERIE . . . . .	125	60	8.7	85.8	6.3	12.7	56.3	161.4	206.0	366.7	12.1	10.8	160.7
FAIRFIELD . . . . .	98	43	10.7	86.8	7.9	15.2	57.5	156.4	103.7	255.5	6.8	9.5	115.4
FAYETTE . . . . .	36	20	2.3	19.0	1.6	3.3	12.0	39.8	80.8	120.0	.9	2.4	38.6
FRANKLIN . . . . .	968	385	80.0	782.1	52.6	103.0	458.5	1 582.0	1 320.3	2 883.7	82.4	76.2	1 032.8
FULTON . . . . .	95	45	5.7	42.6	4.7	8.9	30.6	94.2	140.3	233.7	5.4	4.6	55.6
GALLIA . . . . .	23	7	.7	5.0	.6	1.2	3.9	13.1	18.7	31.3	.7	.3	3.2
GEAUGA . . . . .	114	38	4.6	36.2	3.5	6.9	23.2	69.6	56.3	123.7	3.2	4.2	50.2
GREENE . . . . .	84	35	3.4	30.9	2.5	5.0	20.7	62.9	54.4	115.1	2.3	3.2	44.4
GUERNSEY . . . . .	55	20	4.4	34.6	3.4	5.9	24.1	70.0	82.9	141.7	3.3	4.0	50.8
HAMILTON . . . . .	1 657	707	138.5	1 437.5	83.9	168.6	746.7	3 156.5	2 739.1	5 876.1	149.9	151.9	2 445.1
HANCOCK . . . . .	83	36	8.5	86.4	5.6	10.9	47.4	173.6	191.6	360.0	7.1	6.9	70.4
HARDIN . . . . .	51	21	3.0	27.5	2.5	4.6	19.7	62.8	71.4	133.4	9.1	3.1	58.8
HARRISON . . . . .	22	7	1.1	6.0	1.0	1.8	5.2	10.0	5.7	15.3	.1	1.0	6.1
HENRY . . . . .	52	24	3.6	30.1	2.9	6.1	22.5	123.5	148.9	271.8	5.0	3.5	83.7
HIGHLAND . . . . .	46	17	2.5	16.7	2.2	4.4	13.5	40.6	34.1	74.0	1.2	2.1	17.3
HOCKING . . . . .	10	2.5	18.0	2.1	4.2	13.9	42.8	29.2	71.7	71.7	1.6	2.7	30.2
HOLMES . . . . .	22	2.1	14.7	1.8	3.8	12.0	40.9	37.1	78.0	78.0	1.8	1.1	13.0
MURON . . . . .	96	46	7.6	61.3	6.1	12.2	44.8	130.0	143.3	271.2	8.1	6.2	90.6
JACKSON . . . . .	46	17	1.9	13.3	1.5	3.1	8.9	31.3	29.8	61.4	2.5	2.2	26.3
JEFFERSON . . . . .	60	24	9.1	102.8	7.2	14.4	80.8	261.0	343.6	594.1	10.9	10.1	182.5
KNOX . . . . .	47	14	4.1	39.6	2.8	5.9	25.3	74.1	66.1	143.0	1.9	5.1	74.4
LAKE . . . . .	387	136	23.4	230.5	15.3	30.8	133.0	403.2	352.7				

See footnotes at end of table.



TABLE 2. General Statistics for the State, Standard Metropolitan Statistical Areas, and Counties: 1972 and 1967—Continued

(See appendix, Explanation of Terms)

State, standard metropolitan statistical areas, and counties <sup>1</sup>	1972											1967	
	Establishments		All employees <sup>2</sup>		Production workers			Value added by manufac- ture	Cost of materials <sup>3</sup>	Value of shipments <sup>3</sup>	Capital expendi- tures, new	All employees	Value added by manufac- ture
	Total	With 20 employees or more	Number	Payroll	Number	Man-hours	Wages						
	(number)	(number)	(1,000)	(million dollars)	(1,000)	(million)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(1,000)	(million dollars)
COUNTIES—CONTINUED													
MARION . . . . .	86	42	10.1	93.1	7.9	15.4	68.3	243.1	343.3	573.1	10.0	9.2	169.1
MEDINA . . . . .	154	63	7.1	56.8	5.2	10.3	37.1	117.0	120.3	232.9	10.2	4.9	62.1
MEIGS . . . . .	17	5	.3	1.6	.2	.4	1.1	3.6	3.5	7.1	.1	.3	2.9
MERCER . . . . .	55	19	4.9	41.2	4.0	7.8	31.7	89.3	91.5	181.5	1.7	4.7	61.7
MIAMI . . . . .	141	69	12.1	105.9	8.3	16.6	67.6	212.1	262.9	477.2	6.8	12.2	177.9
MONTGOMERY . . . . .	858	319	96.0	1 096.4	66.2	134.7	717.4	1 879.6	1 398.4	3 242.1	96.7	109.6	1 688.9
MORROW . . . . .	23	10	1.5	12.3	1.1	2.2	7.8	26.0	20.9	40.7	1.5	1.2	16.2
MUSKINGUM . . . . .	105	44	9.3	72.9	7.7	14.9	51.7	148.2	142.4	287.3	13.5	9.0	90.5
NOBLE . . . . .	10	4	.5	3.9	.4	.8	3.4	11.7	5.1	16.3	(0)	(0)	(0)
OTTAWA . . . . .	69	23	2.6	23.2	2.1	4.2	17.3	43.1	55.0	96.8	3.2	3.5	44.2
PAULDING . . . . .	26	9	1.2	10.5	1.1	2.2	8.6	18.5	17.4	36.1	1.5	1.3	18.3
PERRY . . . . .	37	16	1.4	9.8	1.2	2.2	6.5	17.1	12.2	29.7	1.1	1.2	9.3
PICKAWAY . . . . .	30	17	4.6	42.3	3.5	7.0	28.1	119.8	127.7	238.9	8.5	3.2	70.5
PIKE . . . . .	25	8	2.1	19.0	1.2	2.4	10.0	62.7	41.7	104.4	.8	(0)	(0)
PORTAGE . . . . .	194	83	9.2	82.2	6.8	13.8	53.4	184.0	141.9	321.7	7.8	8.6	119.0
PREBLE . . . . .	46	17	1.6	11.8	1.1	2.6	7.8	31.6	27.2	59.1	1.9	1.3	17.2
PUTNAM . . . . .	36	10	3.0	25.0	2.6	5.1	19.5	79.9	71.5	149.2	3.4	2.9	57.0
RICHLAND . . . . .	198	77	23.2	233.0	17.5	35.2	161.7	503.7	454.4	943.5	16.8	23.6	385.6
ROSS . . . . .	47	14	4.3	47.5	3.4	8.1	36.4	100.7	78.6	178.2	9.9	6.5	106.0
SANDUSKY . . . . .	107	53	8.2	76.2	6.7	13.9	57.8	230.8	253.7	484.1	14.7	7.9	136.8
SCIOTO . . . . .	65	26	5.0	51.5	3.5	7.8	34.1	95.7	121.9	213.4	3.3	6.3	75.3
SENECA . . . . .	74	37	8.5	79.4	6.9	14.1	57.9	175.4	150.1	319.5	13.6	10.1	159.3
SHELBY . . . . .	80	35	7.5	62.7	5.9	11.8	44.8	121.4	160.7	273.8	5.4	7.9	90.1
STARK . . . . .	549	203	57.3	569.6	42.3	81.8	387.5	1 142.8	1 193.6	2 325.9	137.3	62.5	896.6
SUMMIT . . . . .	774	291	81.9	882.6	48.1	96.7	487.2	1 494.8	1 391.8	2 872.7	100.3	92.5	1 281.8
TRUMBULL . . . . .	267	119	50.3	576.2	40.8	80.5	444.6	1 052.8	1 754.2	2 785.7	74.1	44.2	739.8
TUSCARAWAS . . . . .	165	63	9.2	78.7	7.1	14.0	55.0	170.2	153.6	329.3	8.5	9.8	138.6
UNION . . . . .	38	16	2.6	22.6	2.2	4.2	17.3	90.1	90.3	163.5	6.2	2.6	46.7
VAN WERT . . . . .	45	21	4.0	38.6	3.1	6.7	27.4	87.4	132.1	217.5	2.9	3.3	53.1
VINTON . . . . .	18	5	.6	4.4	.5	.7	3.6	5.4	7.5	12.9	.4	.3	2.0
WARREN . . . . .	79	31	2.9	24.5	2.0	4.0	14.1	43.3	48.2	91.2	3.0	1.8	23.3
WASHINGTON . . . . .	76	30	5.9	55.9	4.1	8.0	35.7	136.1	162.0	295.6	9.2	5.3	104.5
WAYNE . . . . .	147	63	12.0	108.4	9.0	18.0	73.2	222.0	250.2	468.1	12.3	11.6	154.8
WILLIAMS . . . . .	94	48	7.2	61.0	5.5	11.0	41.1	137.7	145.6	282.2	19.7	5.9	64.9
WOOD . . . . .	135	51	13.0	136.5	10.6	22.3	106.6	303.0	238.9	541.8	27.2	8.2	137.8
WYANDOT . . . . .	44	21	2.3	15.7	2.0	4.0	12.8	39.5	38.3	75.8	4.0	1.8	21.1

(NA) Not available. (D) Withheld to avoid disclosing figures for individual companies.

<sup>1</sup>Some counties were withheld from publication in order to (a) avoid disclosing figures for individual companies or (b) permit further checking of the figures for smaller counties. Additional detail will appear in the final report for this State.<sup>2</sup>Includes employment and payroll at central administrative offices and auxiliary units. (For a definition of these units, see appendix.)<sup>3</sup>The total cost of materials and value of shipments may include extensive duplication arising from shipments between establishments in the same industry classification. (For a more complete explanation, see appendix.)<sup>4</sup>The standard metropolitan statistical areas in this State are defined as follows:

AKRON SMSA: Consists of Portage and Summit Counties, OH.

CANTON SMSA: Consists of Carroll and Stark Counties, OH.

CINCINNATI, OH-KY-IN, SMSA: Consists of Clermont, Hamilton, and Warren Counties, OH;

Boone, Campbell, and Kenton Counties, KY; and Dearborn County, IN.

CLEVELAND SMSA: Consists of Cuyahoga, Geauga, Lake, and Medina Counties, OH.

COLUMBUS SMSA: Consists of Delaware, Fairfield, Franklin, Madison, and Pickaway Counties, OH.

DAYTON SMSA: Consists of Greene, Miami, Montgomery, and Preble Counties, OH.

HAMILTON-MIDDLETOWN SMSA: Coextensive with Butler County, OH.

HUNTINGTON-ASHLAND, WV-KY-OH, SMSA: Consists of Cabell and Wayne Counties, WV; Boyd and Greenup Counties, KY; and Lawrence County, OH.

LIMA SMSA: Consists of Allen, Auglaize, Putnam, and Van Wert Counties, OH.

LORAIN-ELYRIA SMSA: Coextensive with Lorain County, OH.

MANSFIELD SMSA: Coextensive with Richland County, OH.

PARKERSBURG-MARIETTA, WV-OH, SMSA: Consists of Wirt and Wood Counties, WV, and

Washington County, OH.

SPRINGFIELD SMSA: Consists of Champaign and Clark Counties, OH.

STREUBENVILLE-WEIRTON, OH-WV, SMSA: Consists of Jefferson County, OH, and Brooke and

Hancock Counties, WV.

TOLEDO, OH-MI, SMSA: Consists of Fulton, Lucas, Ottawa, and Wood Counties, OH, and

Monroe County, MI.

WHEELING, WV-OH, SMSA: Consists of Marshall and Ohio Counties, WV, and Belmont

County, OH.

YOUNGSTOWN-WARREN, SMSA: Consists of Mahoning and Trumbull Counties, OH.

TABLE 3. General Statistics for the State, by Industry Groups and Industries: 1972 and 1967

(See appendix, Explanation of Terms)

Code	Industry	1972										1967		
		Establishments		All employees		Production workers			Value added by manufacture	Cost of materials <sup>1</sup>	Value of shipments <sup>1</sup>	Capital expenditures, new	All employees	Value added by manufacture
		Total	With 20 employees or more	Number	Payroll	Number	Man-hours	Wages						
		(number)	(number)	(1,000)	(million dollars)	(1,000)	(million)	(million dollars)					(million dollars)	(million dollars)
	ALL INDUSTRIES, TOTAL <sup>2</sup> . . . . .	16 215	6 383	1 333.9	13 632.5	933.0	1 873.9	8 655.4	26 910.6	28 392.0	54 738.0	1 579.5	1 397.0	20 435.4
20	FOOD AND KINDRED PRODUCTS. . . . .	1 253	550	74.5	632.2	44.5	90.8	353.2	1 756.7	3 197.8	4 943.8	86.6	78.5	1 306.7
201	MEAT PRODUCTS. . . . .	234	94	11.9	113.5	9.2	18.9	81.3	197.7	920.5	1 116.9	10.6	13.0	154.9
2011	MEATPACKING PLANTS . . . . .	135	55	8.0	81.3	6.2	12.9	58.4	137.0	722.0	858.0	5.8	9.3	118.0
2013	SAUSAGES AND OTHER PREPARED MEATS. . . . .	65	27	2.8	26.9	2.1	4.3	18.9	49.3	150.9	199.9	4.5	2.3	29.1
202	DAIRY PRODUCTS . . . . .	213	102	14.6	111.1	5.3	10.7	43.6	267.1	611.1	871.7	9.9	17.9	238.0
2022	CHEESE, NATURAL AND PROCESSED. . . . .	26	8	.9	6.6	.7	1.6	4.9	19.8	62.4	77.3	1.4	.9	10.3
2023	CONDENSED AND EVAPORATED MILK . . . . .	11	8	.9	8.4	.8	1.5	6.5	39.6	61.4	101.3	.8	.8	19.7
2024	ICE CREAM AND FROZEN DESSERTS. . . . .	43	12	.7	6.1	.5	.9	3.5	14.5	28.1	42.4	1.1	1.1	15.0
2026	FLUID MILK . . . . .	127	70	11.9	88.8	3.3	6.5	28.2	191.3	441.1	630.1	6.5	14.8	190.3
203	PRESERVED FRUITS AND VEGETABLES. . . . .	104	50	7.6	57.0	6.1	13.0	41.8	221.6	304.9	525.6	8.5	(NA)	(NA)
2033	CANNED FRUITS AND VEGETABLES . . . . .	47	29	2.8	20.6	2.3	4.9	15.1	67.8	114.9	182.1	2.8	2.9	64.7
2038	FROZEN SPECIALTIES . . . . .	23	13	1.9	13.4	1.6	3.3	9.9	56.6	58.7	115.3	1.9	(NA)	(NA)
204	GRAIN MILL PRODUCTS. . . . .	102	39	4.2	39.8	3.2	6.5	28.2	184.5	324.9	509.9	15.7	3.8	145.4
2041	FLOUR AND OTHER GRAIN MILL PRODUCTS. . . . .	21	6	.4	4.1	.3	.7	2.8	6.5	73.5	80.4	.5	.5	14.0
205	BAKERY PRODUCTS. . . . .	188	83	14.9	131.7	8.9	18.2	72.9	287.1	226.4	513.3	9.2	16.3	220.4
2051	BREAD, CAKE, AND RELATED PRODUCTS. . . . .	175	74	12.4	111.6	6.7	13.8	55.2	220.5	173.3	393.8	6.7	13.4	163.5
2052	COOKIES AND CRACKERS . . . . .	13	9	2.4	20.1	2.2	4.4	17.7	66.6	53.1	119.5	2.6	2.9	56.8
206	SUGAR AND CONFECTIONERY PRODUCTS . . . . .	70	27	2.7	18.5	2.2	4.1	12.4	48.7	63.5	109.4	2.8	(NA)	(NA)
2065	CONFECTIONERY PRODUCTS . . . . .	63	22	2.1	13.1	1.6	2.8	8.1	23.6	40.0	63.8	1.2	EE	(D)
207	FATS AND OILS. . . . .	29	20	2.5	26.1	1.5	3.3	14.7	91.4	272.0	364.4	8.4	(NA)	(NA)
2077	ANIMAL AND MARINE FATS AND OILS. . . . .	20	12	.6	6.1	.4	.8	3.0	15.8	20.1	36.5	2.3	.7	8.4
208	BEVERAGES. . . . .	148	86	11.2	97.8	5.2	10.3	39.8	329.9	297.2	626.5	16.9	10.3	187.4
2082	MALT BEVERAGES . . . . .	7	7	1.5	16.8	1.0	1.9	10.8	72.5	55.2	127.1	2.5	1.8	43.7
2086	BOTTLED AND CANNED SOFT DRINKS . . . . .	106	71	7.7	64.1	2.8	5.8	18.7	145.4	158.2	303.6	11.8	6.9	95.6
209	MISC. FOODS AND KINDRED PRODUCTS . . . . .	165	49	5.0	36.7	2.9	5.8	18.3	128.2	177.3	305.4	4.5	(NA)	(NA)
2095	ROASTED COFFEE . . . . .	11	8	1.1	8.3	.4	.7	2.7	38.7	74.3	113.6	1.7	.9	17.1
2099	FOOD PREPARATIONS, NEC . . . . .	123	35	3.2	23.7	2.1	4.1	12.5	79.6	77.8	156.7	2.3	3.3	66.3
22	TEXTILE MILL PRODUCTS. . . . .	71	38	9.0	72.4	7.1	14.3	50.8	148.5	156.7	301.8	9.4	8.9	99.7
225	KNITTING MILLS . . . . .	15	10	2.7	17.4	2.3	4.4	13.4	27.2	23.7	49.4	1.7	2.6	19.0
229	MISCELLANEOUS TEXTILE GOODS. . . . .	29	17	4.4	42.5	3.3	6.7	28.9	98.4	118.8	216.1	6.5	4.6	66.5
23	APPAREL, OTHER TEXTILE PRODUCTS. . . . .	347	137	20.5	143.7	15.6	28.5	83.7	297.1	385.3	677.3	(D)	19.4	192.6
2311	MEN'S AND BOYS' SUITS AND COATS. . . . .	22	14	5.1	31.7	4.4	7.7	25.0	84.5	70.7	154.0	.6	5.1	51.4
232	MEN'S AND BOYS' FURNISHINGS. . . . .	32	24	2.9	19.8	2.1	3.9	9.7	43.6	79.5	121.3	.5	3.8	41.6
2327	MEN'S AND BOYS' SEPARATE TROUSERS. . . . .	11	8	1.2	8.6	.9	1.6	3.8	14.3	16.4	30.5	.1	1.6	12.2
233	WOMEN'S, AND MISSES' OUTERWEAR . . . . .	43	28	4.3	39.8	2.4	4.5	14.5	52.2	110.7	166.6	.8	4.3	46.7
2335	WOMEN'S AND MISSES' DRESSES. . . . .	22	11	.7	6.2	.6	1.2	3.3	11.8	16.7	27.8	.1	1.2	9.5
2337	WOMEN'S AND MISSES' SUITS AND COATS. . . . .	9	8	.6	3.6	.3	.6	1.5	10.2	5.6	15.6	(D)	EE	(D)
238	MISC. APPAREL AND ACCESSORIES. . . . .	24	14	2.1	13.2	1.7	3.0	8.7	24.5	16.7	41.7	.5	2.0	18.6
239	MISC. FABRICATED TEXTILE PRODUCTS. . . . .	216	52	5.7	36.7	4.7	8.7	24.6	85.9	101.7	181.6	3.8	3.5	29.0
2391	CURTAINS AND DRAPERIES . . . . .	48	11	.7	3.4	.6	1.0	2.3	5.2	7.1	12.2	.2	.4	3.2
2394	CANVAS AND RELATED PRODUCTS. . . . .	64	12	.9	4.9	.7	1.2	3.1	8.9	8.5	17.3	.1	1.1	8.0
2399	FABRICATED TEXTILE PRODUCTS, NEC . . . . .	35	12	1.2	6.6	1.1	1.9	4.7	16.7	15.8	32.1	.7	.8	5.9
24	LUMBER AND WOOD PRODUCTS . . . . .	807	172	13.7	98.9	11.1	21.7	70.0	200.3	269.8	468.3	14.8	(NA)	(NA)
2411	LOGGING CAMPS, LOGGING CONTRACTORS . . . . .	82	2	.3	1.4	.3	.5	1.2	2.7	3.5	6.3	.4	.2	1.9
242	SAWMILLS AND PLANING MILLS . . . . .	279	35	2.3	14.7	2.0	3.9	11.6	27.8	43.4	71.5	2.2	2.3	17.9
2421	SAWMILLS AND PLANING MILLS, GENERAL. . . . .	247	26	1.5	9.7	1.3	2.5	7.8	20.3	30.0	50.7	1.6	1.8	13.6
2426	HARDWOOD DIMENSION AND FLOORING. . . . .	21	6	.7	3.8	.5	1.1	2.9	5.5	10.7	16.1	.6	(NA)	(NA)
243	MILLWORK, PLYWOOD, STRUC. MEMBERS. . . . .	167	46	4.1	30.7	3.3	6.5	21.5	60.6	80.4	139.3	4.8	(NA)	(NA)
2431	MILLWORK . . . . .	83	26	2.6	19.8	2.1	4.1	13.9	40.4	54.6	93.6	3.9	(NA)	(NA)
244	WOOD CONTAINERS. . . . .	71	27	1.5	9.2	1.3	2.6	7.1	15.7	17.0	32.8	1.3	(NA)	(NA)
2448	WOOD PALLETS AND SKIDS . . . . .	33	15	.8	5.3	.7	1.5	4.1	9.3	9.8	19.2	1.1	(NA)	(NA)
245	WOOD BUILDINGS AND MOBILE HOMES. . . . .	36	33	2.9	24.5	2.3	4.4	16.7	51.8	89.4	139.9	3.9	(NA)	(NA)
2451	MOBILE HOMES . . . . .	16	16	1.6	12.0	1.3	2.6	9.1	23.4	51.4	74.2	2.6	(NA)	(NA)
2452	PREFABRICATED WOOD BUILDINGS . . . . .	20	17	1.4	12.5	1.0	1.8	7.6	28.3	38.0	65.8	1.3	(NA)	(NA)
249	MISCELLANEOUS WOOD PRODUCTS. . . . .	172	29	2.6	18.4	2.1	3.9	12.1	41.7	36.2	78.5	2.1	(NA)	(NA)
2499	WOOD PRODUCTS, NEC . . . . .	163	24	2.2	15.2	1.7	3.2	9.7	34.2	28.2	62.7	1.7	(NA)	(NA)
25	FURNITURE AND FIXTURES . . . . .	310	126	18.0	144.8	14.0	26.9	100.5	294.4	231.1	523.4	11.0	17.3	231.6
251	HOUSEHOLD FURNITURE. . . . .	129	64	8.2	59.4	6.9	13.0	43.3	116.2	119.0	233.9	7.7	(NA)	(NA)
2511	WOOD HOUSEHOLD FURNITURE . . . . .	53	20	2.5	16.3	2.2	4.3	12.8	31.8	26.6	58.2	2.4	(NA)	(NA)
2512	UPHOLSTERED HOUSEHOLD FURNITURE. . . . .	25	14	1.7	13.0	1.4	2.6	9.4	22.7	17.0	39.3	.7	(NA)	(NA)
2515	MATTRESSES AND BEDSPRINGS. . . . .	34	19	2.1	16.1	1.7	3.1	10.9	33.2	38.1	70.8	3.5	EE	(D)
252	OFFICE FURNITURE . . . . .	17	9	3.1	26.9	2.2	4.2	17.1	55.6	30.7	87.8	.6	3.8	59.2
2531	PUBLIC BUILDING, RELATED FURNITURE . . . . .	31	13	1.4	11.9	1.1	2.1	8.4	35.4	19.7	53.0	.7	.7	6.8
254	PARTITIONS AND FIXTURES. . . . .	104	33	4.1	37.7	3.2	6.3	26.5	69.9	47.8	117.7	1.2	4.5	74.8
2541	WOOD PARTITIONS AND FIXTURES . . . . .	73	14	1.3	12.1	1.0	2.0	8.0	20.2	14.0	34.2	.3	1.1	14.3
2542	METAL PARTITIONS AND FIXTURES. . . . .	31	19	2.8	25.6	2.2	4.4	18.5	49.7	33.9	83.5	.9	3.4	60.5
255	MISC. FURNITURE AND FIXTURES . . . . .	29	7	1.1	8.9	.7	1.3	5.3	17.3	13.9	31.0	.7	.6	7.9

See footnotes at end of table.



TABLE 3. General Statistics for the State, by Industry Groups and Industries: 1972 and 1967—Continued

(See appendix, Explanation of Terms)

Code	Industry	1972										1967		
		Establishments		All employees		Production workers			Value added by manufacture	Cost of materials <sup>1</sup>	Value of shipments <sup>1</sup>	Capital expenditures, new	All employees	Value added by manufacture
		Total	With 20 employees or more	Number	Payroll	Number	Man-hours	Wages						
		(number)	(number)	(1,000)	(million dollars)	(1,000)	(million)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(1,000)	(million dollars)
26	PAPER AND ALLIED PRODUCTS. . . .	365	246	37.2	355.3	29.4	62.8	261.8	693.9	775.8	1 464.6	38.9	38.8	552.7
2631	PAPERBOARD MILLS . . . . .	18	18	2.8	31.0	2.3	5.8	26.2	61.9	70.7	132.9	4.9	3.4	60.4
264	MISC. CONVERTED PAPER PRODUCTS . .	142	75	10.3	87.3	7.4	15.0	57.3	190.9	198.4	387.6	15.5	9.1	130.9
2642	ENVELOPES. . . . .	11	9	1.4	11.4	1.1	2.1	7.7	19.2	16.8	36.0	.4	1.4	13.8
2643	BAGS, EXCEPT TEXTILE BAGS. . . . .	29	16	1.5	12.6	1.2	2.5	9.0	26.5	28.0	53.5	2.3	1.4	16.9
2645	DIE-CUT PAPER AND BOARD. . . . .	31	13	1.4	10.5	1.1	2.1	6.9	26.1	20.1	46.4	.9	.8	7.7
2648	STATIONERY PRODUCTS. . . . .	21	7	.6	4.1	.4	.8	2.9	7.9	16.2	24.1	.2	(NA)	(NA)
2649	CONVERTED PAPER PRODUCTS, NEC. . . .	13	8	.7	5.3	.5	1.0	3.4	12.4	14.9	28.4	.2	(NA)	(NA)
265	PAPERBOARD CONTAINERS AND BOXES. . .	179	133	16.0	140.8	12.7	26.2	101.1	253.9	329.1	580.8	10.3	16.3	186.3
2651	FOLDING PAPERBOARD BOXES . . . . .	36	27	4.6	40.5	3.8	7.8	30.9	78.7	81.3	158.0	3.1	5.0	60.2
2652	SETUP PAPERBOARD BOXES . . . . .	11	8	.5	2.9	.4	.8	2.2	4.7	3.3	8.0	.3	.6	4.9
2653	CORRUGATED AND SOLID FIBER BOXES . .	96	71	8.6	78.0	6.6	13.5	53.5	134.5	194.9	329.2	5.3	8.3	95.1
2654	SANITARY FOOD CONTAINERS . . . . .	15	11	.9	7.1	.7	1.5	5.3	14.8	30.6	45.4	.5	.7	9.7
2655	FIBER CANS, DRUMS, SIMILAR PRODUCTS.	21	16	1.4	12.2	1.2	2.5	9.2	21.1	19.1	40.2	1.1	1.6	16.4
27	PRINTING AND PUBLISHING. . . . .	1 894	483	65.0	607.7	40.7	78.0	365.0	1 176.2	570.0	1 739.1	50.5	67.1	874.6
2711	NEWSPAPERS . . . . .	321	121	21.5	198.6	10.9	20.2	100.4	374.5	119.9	494.4	16.7	18.2	238.1
2721	PERIODICALS. . . . .	83	25	4.5	39.8	.9	1.7	7.2	123.1	38.7	158.6	2.1	4.5	77.2
273	BOOKS. . . . .	52	19	3.0	29.5	1.7	3.4	14.7	96.1	45.3	142.3	(D)	4.0	73.5
2731	BOOK PUBLISHING. . . . .	30	10	1.6	15.7	.5	1.0	4.2	69.2	32.8	102.8	.7	1.8	42.9
2732	BOOK PRINTING. . . . .	22	9	1.4	13.8	1.2	2.5	10.5	26.9	12.5	39.5	(D)	2.2	30.6
2741	MISCELLANEOUS PUBLISHING . . . . .	61	15	1.2	9.1	.8	1.4	4.6	15.9	9.1	24.9	1.9	CC	(D)
275	COMMERCIAL PRINTING. . . . .	1 136	217	24.5	235.8	18.9	36.4	169.2	392.8	265.2	653.9	19.8	(NA)	(NA)
2751	COMMERCIAL PRINTING, LETTERPRESS . .	632	70	10.8	108.2	8.9	16.9	83.9	169.6	148.6	316.3	8.4	(NA)	(NA)
2752	COMMERCIAL PRINTING, LITHOGRAPHIC . .	470	135	13.1	122.0	9.6	18.5	81.4	214.3	111.7	323.8	11.0	(NA)	(NA)
2753	ENGRAVING AND PLATE PRINTING . . . .	26	8	.4	2.9	.3	.6	2.2	5.2	1.9	7.1	.2	(NA)	(NA)
2754	COMMERCIAL PRINTING, GRAVURE . . . .	8	4	.3	2.7	.2	.4	1.8	3.8	3.0	6.8	.2	(NA)	(NA)
2761	MANIFOLD BUSINESS FORMS. . . . .	32	20	3.2	29.6	2.5	5.0	22.0	78.2	43.9	122.0	2.9	4.9	79.9
2782	BLANKBOOKS AND LOOSELEAF BINDERS . .	15	7	.6	4.4	.5	1.0	3.2	9.3	3.5	12.9	.2	.5	6.5
279	PRINTING TRADE SERVICES. . . . .	149	45	2.7	29.4	2.0	3.7	21.8	45.5	9.7	55.1	(D)	(NA)	(NA)
2791	TYPESETTING. . . . .	90	19	1.2	12.3	1.0	1.8	9.5	18.8	1.6	20.4	.5	1.1	13.0
2793	PHOTOENGRAVING . . . . .	25	10	.6	6.0	.3	.7	4.1	9.3	2.7	11.9	.2	.6	7.9
2795	LITHOGRAPHIC PLATEMAKING SERVICES. .	27	14	.8	10.4	.6	1.2	7.8	15.5	4.6	20.1	(D)	(NA)	(NA)
28	CHEMICALS AND ALLIED PRODUCTS. . .	676	283	46.8	488.0	28.1	57.0	263.2	1 929.5	1 538.4	3 440.4	117.3	47.7	1 358.6
281	INDUSTRIAL INORGANIC CHEMICALS . . .	85	36	7.2	78.1	4.7	9.1	47.9	260.0	223.8	391.4	21.3	(NA)	(NA)
2813	INDUSTRIAL GASES . . . . .	50	10	.6	5.7	.3	.7	3.2	46.7	15.6	62.2	5.1	.9	37.4
282	PLASTICS MATERIALS AND SYNTHETICS. .	36	29	6.9	73.2	5.1	11.0	51.6	238.7	302.9	535.2	21.1	(NA)	(NA)
283	DRUGS. . . . .	39	13	3.1	33.1	.9	1.8	6.8	96.2	34.0	124.5	4.5	3.2	67.2
284	SOAPS, CLEANERS, AND TOILET GOODS. . .	119	38	8.4	89.0	5.2	10.5	50.7	733.4	282.8	1 108.1	29.6	(NA)	(NA)
2841	SOAP AND OTHER DETERGENTS. . . . .	40	15	2.9	33.2	1.9	3.9	21.0	205.5	117.6	323.3	10.7	FF	(D)
2851	PLANTS AND ALLIED PRODUCTS . . . . .	97	49	7.2	72.6	3.6	7.4	30.1	185.7	201.0	379.6	7.2	7.3	140.8
286	INDUSTRIAL ORGANIC CHEMICALS . . . .	47	28	5.2	57.5	3.0	6.2	30.6	160.6	201.5	360.0	12.5	(NA)	(NA)
2865	CYCLIC CRUDES AND INTERMEDIATES. . .	13	9	2.1	22.5	1.5	3.0	14.2	61.4	89.3	147.2	4.8	1.8	32.3
2869	INDUSTRIAL ORGANIC CHEMICALS, NEC. . .	30	18	3.0	34.7	1.5	3.1	16.2	98.8	111.7	212.0	7.6	(NA)	(NA)
287	AGRICULTURAL CHEMICALS . . . . .	60	25	2.3	19.9	1.4	2.8	11.3	83.0	113.8	190.8	4.8	(NA)	(NA)
2875	FERTILIZERS, MIXING ONLY . . . . .	40	17	1.3	10.1	.8	1.6	6.1	57.2	82.1	132.1	3.3	1.1	33.5
289	MISCELLANEOUS CHEMICAL PRODUCTS. . .	193	65	6.6	64.5	4.1	8.1	34.2	172.0	178.5	350.7	16.3	(NA)	(NA)
2893	PRINTING INK . . . . .	33	16	1.1	10.7	.6	1.3	5.6	23.6	31.3	54.6	1.5	.8	14.1
2899	CHEMICAL PREPARATIONS, NEC . . . . .	125	33	4.1	40.8	2.5	5.1	21.0	113.4	108.8	222.4	(D)	(NA)	(NA)
29	PETROLEUM AND COAL PRODUCTS. . . .	169	47	6.6	76.8	4.7	10.1	51.8	304.5	1 160.6	1 463.7	48.7	6.5	225.9
2911	PETROLEUM REFINING . . . . .	15	12	3.5	44.3	2.5	5.2	30.4	217.4	1 043.4	1 260.1	42.8	3.3	160.5
295	PAVING AND ROOFING MATERIALS . . . .	117	25	2.4	25.1	1.8	4.1	18.3	63.5	88.0	150.3	4.7	2.3	43.1
2951	PAVING MIXTURES AND BLOCKS . . . . .	100	14	.9	9.7	.7	1.4	6.9	24.9	54.2	78.7	3.3	.9	19.7
2952	ASPHALT FELTS AND COATINGS . . . . .	17	11	1.4	15.4	1.1	2.7	11.4	38.6	33.8	71.6	1.4	1.4	23.4
299	MISC. PETROLEUM AND COAL PRODUCTS.	37	10	.7	7.4	.4	.7	3.2	23.7	29.2	53.3	1.3	(NA)	(NA)
2992	LUBRICATING OILS AND GREASES . . . .	31	8	.6	6.0	.2	.5	2.1	20.6	25.0	45.8	.8	(NA)	(NA)
30	RUBBER AND MISC. PLASTICS PROD . . .	761	406	97.0	951.4	72.6	144.8	639.9	2 021.5	1 629.4	3 626.4	160.9	(NA)	(NA)
3011	TIRES AND INNER TUBES. . . . .	27	19	26.9	328.0	18.6	37.3	218.2	758.3	671.6	1 416.2	71.6	31.1	576.9
3079	MISCELLANEOUS PLASTICS PRODUCTS. . .	537	269	38.1	314.9	30.5	61.2	221.6	726.3	546.4	1 261.8	59.0	(NA)	(NA)
32	STONE, CLAY, AND GLASS PRODUCTS. . .	1 013	399	60.2	553.0	49.1	99.2	424.0	1 224.3	767.4	1 980.1	89.1	61.1	852.3
322	GLASS, GLASSWARE, PRESSED OR BLOWN	29	21	10.7	97.3	9.0	17.6	78.0	209.0	82.5	285.4	10.7	12.3	163.5
3231	PRODUCTS OF PURCHASED GLASS, NEC . .	63	28	7.0	67.7	5.9	11.9	54.1	150.9	128.8	276.7	(D)	3.8	63.6
3241	CEMENT, HYDRAULIC. . . . .	10	9	1.5	17.0	1.2	2.5	13.1	40.8	28.5	68.6	3.4	1.6	34.3
325	STRUCTURAL CLAY PRODUCTS . . . . .	118	84	7.9	60.3	6.7	13.3	46.8	114.6	56.5	172.8	6.8	9.9	100.3
3251	BRICK AND STRUCTURAL CLAY TILE . . . .	45	31	2.4	17.8	2.0	4.2	14.2	34.7	15.9	51.9	2.1	3.0	30.7
3259	STRUCTURAL CLAY PRODUCTS, NEC. . . .	25	18	2.1	16.6	1.8	3.3	12.6	27.0	12.2	38.4	1.4	2.6	24.8

See footnotes at end of table.

TABLE 3. General Statistics for the State, by Industry Groups and Industries: 1972 and 1967—Continued

(See appendix, Explanation of Terms)

Code	Industry	1972											1967	
		Establishments		All employees		Production workers			Value added by manufacture	Cost of materials <sup>1</sup>	Value of shipments <sup>1</sup>	Capital expenditures, new	All employees	Value added by manufacture
		Total	With 20 employees or more	Number	Payroll	Number	Man-hours	Wages						
		(number)	(number)	(1,000)	(million dollars)	(1,000)	(million)	(million dollars)				(million dollars)	(1,000)	(million dollars)
3269	POTTERY PRODUCTS, NEC. . . . .	39	21	2.2	13.5	1.7	3.4	8.5	24.6	10.2	34.9	.8	EE	(D)
327	CONCRETE, GYPSUM, PLASTER PRODUCTS	537	143	9.8	94.2	7.1	14.7	62.4	206.4	195.9	400.5	23.1	10.3	158.1
3271	CONCRETE BLOCK AND BRICK . . . . .	77	18	1.1	10.4	.7	1.5	6.1	24.2	20.5	44.5	1.7	1.3	17.2
3272	CONCRETE PRODUCTS, NEC. . . . .	202	47	3.5	31.4	2.8	5.7	21.8	66.3	43.9	108.4	3.6	3.2	42.7
3273	READY-MIXED CONCRETE . . . . .	243	65	3.8	39.2	2.5	5.0	24.4	81.5	103.6	185.1	12.6	4.3	68.2
3274	LIME . . . . .	10	9	.9	8.1	.7	1.5	6.1	19.2	18.1	37.3	4.9	1.1	19.7
3275	GYPSUM PRODUCTS. . . . .	4	3	.4	4.3	.3	.8	3.4	12.8	9.0	21.6	.4	.4	10.3
329	MISC. NONMETALLIC MINERAL PRODUCTS	150	67	10.1	93.1	8.0	16.4	70.4	233.1	165.2	397.8	13.1	(NA)	(NA)
3291	ABRASIVE PRODUCTS. . . . .	38	19	2.6	21.6	1.9	3.6	13.8	71.1	30.7	102.4	1.5	2.4	33.3
3292	ASBESTOS PRODUCTS. . . . .	7	5	.7	6.6	.5	1.2	5.1	15.6	14.9	30.6	.5	(NA)	(NA)
3295	MINERALS, GROUND OR TREATED. . . . .	26	11	.7	7.1	.5	1.1	5.4	17.6	6.8	24.2	1.4	.7	14.2
3296	MINERAL WOOL . . . . .	10	9	4.1	41.1	3.4	7.2	34.0	85.8	77.7	163.0	8.5	FF	(D)
3297	NONCLAY REFRACTORIES . . . . .	14	7	1.4	14.0	1.1	2.2	9.2	42.2	31.6	72.9	.5	1.7	35.8
3299	NONMETALLIC MINERAL PRODUCTS, NEC. . . . .	25	4	.3	2.5	.3	.5	1.7	8.4	3.5	11.8	.4	.4	5.7
33	PRIMARY METAL INDUSTRIES . . . . .	639	394	143.8	1 601.7	119.2	239.0	1 264.1	3 166.2	4 173.8	7 191.8	280.4	169.6	2 702.5
331	BLAST FURNACE, BASIC STEEL PROD. . . . .	99	87	86.7	1 002.8	72.3	142.3	801.6	2 178.6	3 067.4	5 102.5	210.0	95.5	1 691.1
3312	BLAST FURNACES AND STEEL MILLS . . . . .	36	33	72.9	858.4	61.1	122.0	692.2	1 848.4	2 547.1	4 267.9	161.9	76.7	1 319.1
3315	STEEL WIRE AND RELATED PRODUCTS. . . . .	20	17	2.8	26.4	2.4	3.0	20.8	70.9	72.0	135.8	2.2	5.0	145.6
3316	COLD FINISHING OF STEEL SHAPES . . . . .	18	15	3.5	39.5	2.7	5.3	28.6	98.3	192.8	284.8	(D)	4.9	82.9
332	IRON AND STEEL FOUNDRIES . . . . .	139	112	30.5	341.9	25.7	53.4	277.4	545.0	340.3	884.8	48.6	32.4	402.2
3321	GRAY IRON FOUNDRIES. . . . .	102	80	19.8	237.0	16.9	36.6	195.1	381.8	257.4	638.1	38.4	19.9	255.5
3325	STEEL FOUNDRIES, NEC. . . . .	26	22	6.9	65.1	5.5	10.5	49.0	101.3	49.4	150.6	4.1	(NA)	(NA)
3341	SECONDARY NONFERROUS METALS. . . . .	27	18	1.6	16.4	1.2	2.7	11.1	29.6	115.4	145.8	(D)	EE	(D)
335	NONFERROUS ROLLING AND DRAWING . . . . .	54	42	9.8	101.8	7.4	15.4	69.1	154.0	435.3	587.4	7.9	11.4	189.2
3351	COPPER ROLLING AND DRAWING . . . . .	9	8	2.0	22.3	1.5	3.2	16.0	25.2	129.6	155.6	1.0	2.3	36.9
3354	ALUMINUM EXTRUDED PRODUCTS . . . . .	15	14	1.6	13.4	1.3	2.7	9.9	25.5	41.9	66.5	1.0	(NA)	(NA)
3356	NONFERROUS ROLLING, DRAWING, NEC. . . . .	13	8	2.8	28.3	2.0	3.8	17.4	43.2	76.8	120.2	2.9	3.5	58.1
336	NONFERROUS FOUNDRIES . . . . .	193	90	12.8	118.8	10.7	21.5	90.9	219.3	169.7	386.5	9.1	15.1	193.2
3361	ALUMINUM FOUNDRIES . . . . .	124	58	8.9	82.8	7.4	14.6	63.6	146.3	111.9	255.2	6.2	9.1	102.0
3362	BRASS, BRONZE, AND COPPER FOUNDRIES. . . . .	48	19	1.2	9.7	1.0	1.9	7.4	18.8	19.3	38.8	1.0	1.9	24.9
3369	NONFERROUS FOUNDRIES, NEC. . . . .	21	13	2.8	26.3	2.3	4.9	19.8	54.2	38.5	92.5	1.9	4.1	66.3
339	MISC. PRIMARY METAL PRODUCTS . . . . .	122	43	2.6	23.8	2.0	4.2	16.7	44.0	35.1	78.6	3.6	(NA)	(NA)
3398	METAL HEAT TREATING. . . . .	108	34	1.8	16.7	1.4	2.9	11.6	30.2	29.4	59.2	1.9	(NA)	(NA)
3399	PRIMARY METAL PRODUCTS, NEC. . . . .	14	9	.8	7.1	.6	1.3	5.1	13.9	5.6	19.4	1.7	(NA)	(NA)
34	FABRICATED METAL PRODUCTS. . . . .	2 148	1 025	157.0	1 595.9	121.5	247.0	1 133.5	3 181.3	3 010.4	6 113.3	136.4	(NA)	(NA)
341	METAL CANS AND SHIPPING CONTAINERS . . . . .	39	34	4.9	46.9	4.0	8.0	35.4	117.7	177.2	293.2	11.2	(NA)	(NA)
3411	METAL CANS . . . . .	19	17	3.3	31.9	2.7	5.6	24.4	89.7	135.6	223.9	9.9	2.7	55.4
3412	METAL BARRELS, DRUMS, AND PAILS. . . . .	20	17	1.6	15.0	1.3	2.4	11.0	28.0	41.6	69.3	1.3	1.5	17.3
342	CUTLERY, HANDTOOLS AND HARDWARE. . . . .	132	71	16.1	170.3	12.4	25.0	121.9	417.0	257.1	671.1	(D)	18.5	340.0
3421	CUTLERY. . . . .	10	5	.6	4.7	.5	1.0	3.5	9.3	7.4	16.8	.3	.6	7.7
3423	HAND AND EDGE TOOLS, NEC. . . . .	58	27	5.2	48.8	4.0	7.9	33.6	112.4	59.8	172.7	2.2	5.1	83.6
3425	HANDSAWS AND SAWBLADES . . . . .	11	5	.4	2.8	.3	.6	2.0	4.6	3.1	7.4	(D)	.3	2.9
3429	HARDWARE, NEC. . . . .	53	34	9.9	114.1	7.6	15.5	82.9	290.7	186.9	474.3	7.5	12.4	245.9
343	PLUMBING, HEATING, EXC. ELECTRIC . . . . .	54	28	6.8	67.1	4.6	9.4	40.0	154.2	151.1	297.3	7.7	(NA)	(NA)
3431	METAL SANITARY WARE. . . . .	6	4	1.7	16.2	1.4	2.6	12.8	49.2	33.6	83.0	2.4	1.4	20.0
3432	PLUMBING FITTINGS AND BRASS GOODS. . . . .	20	12	2.4	24.6	1.4	3.2	12.3	46.6	49.7	95.6	2.6	1.5	16.2
344	FABRICATED STRUCTURAL METAL PROD. . . . .	572	272	32.1	301.5	23.6	46.6	200.2	570.6	691.6	1 242.2	22.3	31.8	479.8
3441	FABRICATED STRUCTURAL METAL PRODUCTS	135	71	5.4	50.4	4.0	7.9	32.7	85.1	109.8	195.9	2.9	5.6	71.4
3442	METAL DOORS, SASH, AND TRIM. . . . .	78	33	5.8	48.8	4.1	8.6	30.0	99.4	115.3	214.6	4.0	5.1	56.4
3443	FABRICATED PLATEWORK (BOILER SHOPS). . . . .	100	60	8.9	86.9	6.8	12.8	61.9	166.5	162.6	318.1	5.5	10.0	206.7
3444	SHEET METALWORK. . . . .	165	72	7.4	71.3	5.3	10.7	46.9	143.5	177.3	318.4	4.7	7.5	95.9
3446	ARCHITECTURAL METALWORK. . . . .	66	20	2.1	17.5	1.6	3.2	11.9	25.9	39.7	59.2	2.6	1.3	16.6
345	SCREW MACHINE PRODUCTS, BOLTS, ETC	248	128	14.0	135.4	11.2	23.1	97.0	268.0	212.6	477.6	(D)	17.2	232.0
3451	SCREW MACHINE PRODUCTS . . . . .	174	75	4.7	40.6	3.9	8.2	30.2	69.9	49.1	118.5	(D)	6.2	74.1
3452	BOLTS, NUTS, RIVETS, AND WASHERS . . . . .	74	53	9.3	94.7	7.3	14.9	66.8	198.1	163.5	359.1	8.9	11.0	157.9
346	METAL FORGINGS AND STAMPINGS . . . . .	349	219	49.0	564.1	40.7	84.5	439.0	999.5	1 056.5	2 043.6	43.5	(NA)	(NA)
3465	AUTOMOTIVE STAMPINGS . . . . .	91	76	27.9	349.4	23.4	49.0	276.6	613.4	619.8	1 230.9	20.6	(NA)	(NA)
3469	METAL STAMPINGS, NEC. . . . .	212	107	12.6	110.5	10.3	20.9	80.0	212.9	207.2	414.4	12.8	(NA)	(NA)
347	METAL SERVICES, NEC. . . . .	382	98	6.9	52.4	5.5	11.2	36.8	102.7	48.8	150.9	5.7	7.4	82.0
3471	PLATING AND POLISHING. . . . .	281	74	5.2	38.7	4.1	8.4	27.1	80.9	34.2	114.8	4.4	4.7	49.9
3479	METAL COATING AND ALLIED SERVICES. . . . .	101	24	1.7	13.7	1.4	2.8	9.7	21.8	14.5	36.1	1.3	2.7	32.0
348	ORDNANCE AND ACCESSORIES, NEC. . . . .	13	7	2.1	25.7	.8	1.5	7.8	53.1	12.9	41.8	4.1	(NA)	(NA)
349	MISC. FABRICATED METAL PRODUCTS. . . . .	359	168	25.2	232.4	18.6	37.8	155.4	498.6	402.7	895.6	18.9	(NA)	(NA)
3494	VALVES AND PIPE FITTINGS . . . . .	63	41	8.0	74.2	5.9	12.2	49.6	166.2	118.1	279.3	5.9	10.8	135.4
3495	WIRE SPRINGS . . . . .	25	16	1.2	10.2	1.0	2.3	7.4	17.3	14.8	31.9	1.5	(NA)	(NA)
3496	MISC. FABRICATED WIRE PRODUCTS . . . . .	77	33	2.4	20.4	1.8	3.6	13.4	35.3	32.7	67.0	1.2	(NA)	(NA)
35	MACHINERY, EXCEPT ELECTRICAL . . . . .	3 292	934	191.8	1 999.6	137.8	274.4	1 324.2	3 761.0	2 948.5	6 641.3	165.4	215.3	3 253.8
352	FARM AND GARDEN MACHINERY. . . . .	68	31	5.2	45.6	4.0	7.8	32.6	87.1	108.2	199.2	(D)	(NA)	(NA)
3524	LAWN AND GARDEN EQUIPMENT. . . . .	8	7	1.7	13.7	1.2	2.4	9.3	23.5	50.0	80.4	(D)	(NA)	(NA)
353	CONSTRUCTION AND RELATED MACHINERY	211	122	27.2	282.2	18.1	36.5	170.5	499.0	539.8	1 029.9	16.3	30.2	426.6
3532	MINING MACHINERY . . . . .	24	14	2.5	21.4	1.7	3.3	13.4	40.6	59.8	97.0	1.8	2.3	32.7
3534	ELEVATORS AND MOVING STAIRWAYS . . . . .	13	11	1.2	11.4	.6	1.2	5.1	17.0	16.1	31.9	.7	1.2	16.9
3535	CONVEYORS AND CONVEYING EQUIPMENT. . . . .	39	28	2.2	21.2	1.4	2.9	11.8	39.1	30.6	69.4	.8	2.6	35.0
354	METALWORKING MACHINERY . . . . .	1 061	312	45.7	486.6	31.7	65.4	304.9	818.0	417.4	1 226.7	36.8	61.6	955.8
3541	MACHINE TOOLS, METAL CUTTING TYPES . . . . .	95	39	12.6	129.2	7.2	13.4	64.1	188.9	129.0	316.5	8.0	20.9	331.6
3542	MACHINE TOOLS, METAL FORMING TYPES . . . . .	40	27	5.2	58.0	3.4	7.1	32.5	104.5	54.3	158.0	6.7	7.3	121.5
3544	SPECIAL DIES, TOOLS, JIGS, FIXTURES. . . . .	747	166	13.0	144.4	10.6	23.7	109.8	233.3	77.7	207.2	11.8	15.9	231.2
3545	MACHINE TOOL ACCESSORIES . . . . .	117	48	6.4	63.5	4.7	9.2	42.7	122.5	44.3	164.8	3.3	8.6	140.1
3549	METALWORKING MACHINERY, NEC. . . . .	37	12	1.5	13.5	1.0	2.1	8.3	25.1	23.2	46.8	.8	(NA)	(NA)

See footnotes at end of table.



TABLE 3. General Statistics for the State, by Industry Groups and Industries: 1972 and 1967—Continued

(See appendix, Explanation of Terms)

Code	Industry	1972										1967		
		Establishments		All employees		Production workers			Value added by manufacture	Cost of materials <sup>1</sup>	Value of shipments <sup>1</sup>	Capital expenditures, new	All employees	Value added by manufacture
		Total	With 20 employees or more	Number	Payroll	Number	Man-hours	Wages						
		(number)	(number)	(1,000)	(million dollars)	(1,000)	(million)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(1,000)	(million dollars)
3554	PAPER INDUSTRIES MACHINERY . . . . .	18	8	.9	9.0	.7	1.3	5.2	11.7	15.2	27.6	(D)	1.5	16.7
3555	PRINTING TRADES MACHINERY. . . . .	38	11	2.2	22.3	1.6	2.9	13.2	44.0	35.0	83.7	(D)	FF	(D)
3559	SPECIAL INDUSTRY MACHINERY, NEC. . . .	150	71	10.7	111.4	7.1	14.6	65.0	225.8	168.2	375.1	12.2	9.0	121.7
356	GENERAL INDUSTRIAL MACHINERY . . . .	333	112	31.5	321.7	21.9	43.0	206.9	573.3	466.5	1 039.0	25.5	36.3	534.9
3564	BLOWERS AND FANS . . . . .	29	15	2.6	22.7	1.9	3.6	14.4	46.9	29.0	74.6	1.3	2.3	33.7
3567	INDUSTRIAL FURNACES AND OVENS. . . .	30	12	2.0	21.2	1.0	1.8	8.9	35.0	34.2	69.0	.6	3.0	50.2
3569	GENERAL INDUSTRIAL MACHINERY, NEC. .	50	12	2.9	24.8	1.6	3.2	12.9	59.3	27.3	87.6	2.2	3.2	47.5
357	OFFICE AND COMPUTING MACHINES. . . .	29	16	13.4	129.2	11.2	20.5	108.9	268.8	107.9	379.2	9.3	FF	(D)
358	REFRIGERATION, SERVICE MACHINERY . .	103	54	31.6	358.8	24.2	50.2	260.5	792.2	826.4	1 582.7	34.4	15.7	295.5
3589	SERVICE INDUSTRY MACHINERY, NEC. . . .	45	15	1.5	12.9	1.0	2.0	7.3	36.6	27.9	64.9	.7	2.0	37.0
359	MISC. MACHINERY, EXCEPT ELECTRICAL	1 221	165	16.9	164.4	12.9	23.6	114.9	294.8	142.4	431.2	13.1	(NA)	(NA)
36	ELECTRIC, ELECTRONIC EQUIPMENT..	574	309	107.3	981.4	80.3	155.9	646.8	2 211.7	1 689.3	3 840.2	80.7	(NA)	(NA)
361	ELECTRIC DISTRIBUTING EQUIPMENT..	48	26	4.3	39.0	3.0	5.7	24.0	72.9	68.7	141.8	2.6	(NA)	(NA)
3612	TRANSFORMERS . . . . .	12	9	1.4	12.3	1.2	2.0	9.1	18.9	33.0	51.0	.4	1.7	21.9
3613	SWITCHGEAR AND SWITCHBOARD APPARATUS	36	17	2.9	26.7	1.9	3.7	14.9	54.0	35.7	90.8	2.1	2.9	54.2
362	ELECTRICAL INDUSTRIAL APPARATUS. . .	130	79	26.8	272.4	17.9	36.2	162.0	492.9	357.8	835.1	20.4	34.7	493.7
3621	MOTORS AND GENERATORS. . . . .	41	31	12.9	121.0	9.7	19.3	81.3	222.4	163.9	378.8	7.5	23.3	297.3
3622	INDUSTRIAL CONTROLS. . . . .	45	19	3.4	34.5	1.9	3.6	14.7	63.4	32.4	92.0	3.4	2.5	35.4
3623	WELDING APPARATUS, ELECTRIC. . . . .	16	11	4.5	61.4	3.1	6.8	40.8	118.8	120.5	239.6	3.6	FF	(D)
363	HOUSEHOLD APPLIANCES . . . . .	41	27	23.2	221.6	18.2	35.8	157.1	611.4	553.6	1 141.0	22.9	34.6	632.0
3634	ELECTRIC HOUSEWARES AND FANS . . . .	14	9	2.6	23.1	1.6	3.3	12.3	61.6	41.0	102.4	(D)	2.2	45.3
364	ELECT. LIGHTING AND WIRING EQUIP. . .	110	70	17.3	133.0	14.1	26.9	94.9	328.1	224.6	551.1	9.4	16.0	252.1
3643	CURRENT-CARRYING WIRING DEVICES. . .	33	24	2.8	20.1	2.3	4.4	14.0	45.3	29.2	75.2	3.7	EE	(D)
3644	NONCURRENT-CARRYING WIRING DEVICES .	12	E	2.2	18.7	1.6	3.4	11.9	27.5	21.8	48.8	.7	2.1	24.9
3646	COMMERCIAL LIGHTING FIXTURES . . . .	14	11	1.2	9.1	.8	1.6	5.1	30.5	28.7	58.1	.5	(NA)	(NA)
3648	LIGHTING EQUIPMENT, NEC. . . . .	11	E	1.4	14.3	1.0	1.9	7.5	26.9	24.3	49.5	.7	(NA)	(NA)
365	RADIO AND TV RECEIVING EQUIPMENT . .	25	6	1.5	7.1	1.2	2.3	4.9	22.5	18.7	39.7	.7	1.0	7.7
366	COMMUNICATION EQUIPMENT. . . . .	60	25	13.3	129.5	9.4	17.3	80.9	241.4	166.2	402.5	11.2	14.1	165.5
367	ELECTRONIC COMPONENTS AND ACCESS.	90	44	8.3	65.3	6.8	13.0	46.5	164.1	105.4	266.2	5.6	10.6	134.8
369	MISC. ELECTRICAL EQUIP., SUPPLIES.	70	32	12.7	113.6	9.7	18.7	76.7	278.4	194.4	462.9	7.9	10.4	170.6
3691	STORAGE BATTERIES. . . . .	4	3	.3	2.3	.2	.4	1.6	3.7	8.1	11.4	.4	.2	1.6
3694	ENGINE ELECTRICAL EQUIPMENT. . . . .	14	9	7.4	67.5	5.7	10.6	46.3	176.3	112.7	283.1	3.1	6.4	104.8
3699	ELECTRICAL EQUIPMENT, SUPPLIES, NEC	45	14	2.0	15.8	1.5	3.0	9.9	29.7	29.2	58.6	2.1	.7	12.2
37	TRANSPORTATION EQUIPMENT . . . . .	439	252	162.9	1 982.4	124.4	260.2	1 414.7	3 838.1	5 449.1	9 217.6	(D)	(NA)	(NA)
371	MOTOR VEHICLES AND EQUIPMENT . . . .	241	145	118.4	1 467.5	98.0	207.0	1 161.9	2 914.7	4 708.2	7 566.2	(D)	105.9	1 724.3
3711	MOTOR VEHICLES AND CAR BODIES. . . .	19	12	33.3	410.0	27.8	56.9	328.1	953.9	2 739.2	3 679.0	(D)	30.1	574.0
3713	TRUCK AND BUS BODIES . . . . .	40	22	4.7	43.1	3.5	6.6	29.7	71.0	74.9	144.8	2.0	5.8	67.7
3714	MOTOR VEHICLE PARTS AND ACCESSORIES.	169	106	79.9	1 010.5	66.3	142.7	801.0	1 879.1	1 883.7	3 721.3	(D)	67.1	1 052.4
3715	TRUCK TRAILERS . . . . .	13	5	.5	3.9	.4	.8	3.0	10.7	10.4	21.1	.2	3.0	30.2
372	AIRCRAFT AND PARTS . . . . .	69	47	33.0	417.3	17.4	35.8	179.4	724.3	500.0	1 231.0	22.9	(NA)	(NA)
3728	AIRCRAFT EQUIPMENT, NEC. . . . .	40	26	10.3	115.4	6.2	12.9	62.0	184.4	127.5	318.1	4.4	(NA)	(NA)
373	SHIP, BOAT BUILDING, REPAIRING . . . .	41	12	2.4	18.7	1.9	3.6	16.2	31.2	23.5	54.5	1.4	2.3	21.4
3743	RAILROAD EQUIPMENT . . . . .	12	10	3.0	30.7	2.4	4.6	23.6	54.6	55.7	108.9	6.4	(NA)	(NA)
379	MISC. TRANSPORTATION EQUIPMENT . . .	64	31	3.0	22.2	2.5	4.8	16.6	40.5	87.7	124.5	2.9	(NA)	(NA)
38	INSTRUMENTS AND RELATED PRODUCTS	289	116	20.2	169.4	13.3	26.1	92.3	321.6	163.1	478.2	11.4	(NA)	(NA)
3811	ENGINEERING, SCIENTIFIC INSTRUMENTS*	30	6	.9	8.2	.6	1.1	4.3	14.8	7.7	22.0	1.0	.8	9.9
382	MEASURING AND CONTROLLING DEVICES.	103	54	14.3	123.2	9.2	17.9	66.2	227.9	101.9	327.2	7.9	(NA)	(NA)
3822	ENVIRONMENTAL CONTROLS . . . . .	14	11	5.3	40.7	4.4	8.5	29.5	72.7	28.3	98.6	(D)	3.5	39.1
3823	PROCESS CONTROL INSTRUMENTS. . . . .	13	10	3.5	33.2	1.6	3.2	13.3	46.4	24.9	77.4	2.1	(NA)	(NA)
3825	INSTRUMENTS TO MEASURE ELECTRICITY .	37	20	3.1	25.4	2.0	3.8	13.4	55.1	22.8	74.8	1.3	(NA)	(NA)
384	MEDICAL INSTRUMENTS AND SUPPLIES . .	95	42	3.5	26.4	2.6	5.0	15.6	53.7	37.0	89.5	1.3	2.9	32.3
3842	SURGICAL APPLIANCES AND SUPPLIES . .	55	23	1.8	11.5	1.4	2.7	7.3	22.6	18.7	41.1	(D)	1.5	15.9
3851	OPHTHALMIC GOODS . . . . .	26	5	.9	6.0	.6	1.1	3.4	11.2	9.0	19.4	.5	.3	2.3
3861	PHOTOGRAPHIC EQUIPMENT AND SUPPLIES.	22	6	.5	4.5	.3	.7	2.2	10.5	5.8	16.1	.5	BB	(D)
39	MISC. MANUFACTURING INDUSTRIES . . .	570	152	18.1	134.7	13.9	26.2	85.3	280.3	194.9	476.6	(D)	19.7	223.7
391	JEWELRY, SILVERWARE, PLATED WARE . .	39	4	.5	4.1	.4	.8	2.7	9.0	7.3	16.1	.1	.5	6.4
3911	JEWELRY, PRECIOUS METAL. . . . .	28	3	.3	2.8	.3	.5	1.8	5.5	4.8	10.1	(Z)	BB	(D)
394	TOYS AND SPORTING GOODS. . . . .	114	30	6.3	43.1	5.0	9.1	27.1	102.8	64.2	172.2	7.1	7.5	94.7
3944	GAMES, TOYS, AND CHILDREN'S VEHICLES	34	12	3.8	26.2	3.0	5.3	14.3	64.9	40.8	109.4	5.6	(NA)	(NA)
3949	SPORTING AND ATHLETIC GOODS, NEC . .	58	16	2.3	16.0	1.9	3.6	12.0	35.6	22.2	59.0	1.5	3.9	50.3
395	PENS, PENCILS, OFFICE, ART GOODS . . .	41	14	1.5	11.8	.9	1.9	6.3	25.7	17.8	43.8	.4	EE	(D)
399	MISCELLANEOUS MANUFACTURES . . . .	340	93	8.4	65.3	6.4	12.3	41.6	122.8	91.0	209.7	6.1	8.6	94.6
3995	BURIAL CASKETS . . . . .	14	10	1.0	7.9	.8	1.5	5.4	13.8	8.6	22.2	.4	(NA)	(NA)
3999	MANUFACTURING INDUSTRIES, NEC. . . .	117	22	2.3	14.6	1.9	3.6	9.8	29.2	22.0	48.8	(D)	1.9	18.1
--	ADMINISTRATIVE AND AUXILIARY . . . .	520	285	77.4	999.7	-	-	-	-	-	-	-	62.1	-

Note: The following symbols indicate employment size range for 1967:

AA less than 250 employees      EE 1,000 to 2,499 employees  
BB 250 to 499 employees      FF 2,500 employees and over  
CC 500 to 999 employees

- Represents zero. (NA) available. Because of a revision to this industry or industry group in the 1972 edition of the SIC manual, 1967 census data are not available on a comparable basis. (D) Withheld to avoid disclosing figures for individual companies. (Z) Less than half of the unit of measurement shown.

<sup>1</sup>The total cost of materials and value of shipments for industry groups shown may include extensive duplication arising from shipments between establishments in the same industry classification. (For a more complete explanation, see appendix.)

<sup>2</sup>Includes figures for industry groups which have been withheld from publication in order to (a) avoid disclosing figures for individual companies or (b) permit further checking of figures for smaller industry groups. Additional detail will appear in the final report for this State.

## Appendix A. SCOPE AND COVERAGE

This report is one of a series presenting preliminary information, by State, from the 1972 Census of Manufactures. The data will be superseded in a final report which, in turn, will be included in *Volume III, Area Statistics, 1972 Census of Manufactures*. The final report will include a comprehensive discussion of the concepts and definitions used in the census.

The census of manufactures covers each manufacturing establishment in the United States with one paid employee or more; manufacturing establishments with no employees are excluded. Firms which operated more than one establishment were required to file a separate report for each location. Companies which engaged in distinctly different lines of activity at one location were asked to submit separate reports if the company records permitted such a separation and the activities were of significant size.

This report includes figures for administrative offices, warehouses, garages, or other auxiliary units which service manufacturing establishments.

In the 1972 census, the approximately 120,000 manufacturing establishments with fewer than 10 employees were excused from filing reports. Under special arrangements which safeguarded the confidentiality of both tax and census records, data on payrolls, sales, and industry classification from the administrative records of the Social Security Administration and the Internal Revenue Service were made available to the Census Bureau for use in the 1972 Economic Censuses (retail and wholesale trade, service industries, construction industries, manufactures, and mineral industries). Estimates for data other than payrolls and sales for these small establishments were constructed from industry averages. The effect on industry aggregates is slight in most industries. For manufacturing as a whole, these small establishments account for less than 3 percent of the payrolls and value added.

Establishments are classified by industry in accordance with industry definitions described in the 1972 edition of the Standard Industrial Classification (SIC) Manual. For 1972, the SIC was significantly revised and the comparability with prior year's data for some industries was significantly affected. The comparability at the 2- and 3-digit SIC levels was less affected. The final volumes of the 1972 Census of Manufactures will contain a table relating aggregates based on the 1972 SIC with aggregates derived from classifying establishments according to the 1967 SIC definitions.

As in earlier censuses, a number of small establishments may have been misclassified as to industry. However, such possible misclassifications have significant effect on *none* of the statistics except the number of establishments. As indicated above, report forms were not mailed to very small establishments (fewer than 10 employees). The industry classifications for these establishments were assigned on the basis of brief descriptions of the general activity of the establishment. Where the description is incomplete or there are relatively fine lines of demarcation among industries or between manufacturing and nonmanufacturing activity, the code assigned to an establishment could differ from that which would have been assigned on the basis of more complete product information. Therefore, the total establishment count for individual industries should be viewed as an approximation rather than a precise measurement. The counts for establishments with 20 employees or more are more reliable than the total number of establishments.

More detailed figures for this State will appear in the final census reports. Final reports will also include a comprehensive discussion of such concepts as "industry" and "establishment," as well as the various statistical items such as "employment," "value of shipments," and "value added." Similar preliminary and final reports will be issued for other States during the coming months. A series of preliminary summary reports showing U.S. totals for each manufacturing industry and for each State are being issued. Final industry reports and final area reports will be published during 1974.

Order forms describing the individual reports and listing their prices may be obtained from any U.S. Department of Commerce district office or from the Publications Distribution Section, Social and Economic Statistics Administration, Washington, D.C. 20233.

The 1972 Census of Manufactures is the 29th census of manufacturing establishments in the United States. For 1972, it was conducted jointly with the censuses of mineral industries, construction industries, retail trade, wholesale trade, and selected services under authority of Title 13 of the United States Code. Title 13 specifies that a census of manufactures be conducted every 5 years and, as amended, to cover years ending in "2" and "7". Title 13 also authorizes an annual sample survey of manufacturing establishments in interim years.



## Appendix B. EXPLANATION OF TERMS

*(For a more complete discussion of these terms and the method of compiling the Census of Manufactures, see the "Introduction" to the 1967 Census of Manufactures, Volume III).*

**All Employees**—All full-time and part-time employees on the payrolls of operating manufacturing establishments for any part of the pay period ending nearest the 12th of the months specified on the report form. Included are all persons on paid sick leave, paid holidays, and paid vacations during these pay periods. Officers of corporations are included as employees; proprietors and partners of unincorporated firms are excluded. The "all employee" number is the average number of production workers for the midmonth payroll period of March, May, August, and November plus the number of nonproduction employees in mid-March.

**Number of Production Workers**—Workers (up through the working foreman level) engaged in fabricating, processing, assembling, inspecting, receiving, packing, warehousing, shipping (but not delivering), and maintenance, repair, janitorial, and watchman services, product development, auxiliary production for plant's own use (e.g., powerplant), recordkeeping, and other closely associated services. Proprietors and partners are excluded.

**Payroll**—This item includes all forms of compensation such as salaries, wages, commissions, dismissal pay, bonuses, vacation and sick leave pay, and compensation in kind, prior to such deductions as employees' Social Security contributions, withholding taxes, group insurance, union dues, and savings bonds. The total includes salaries of officers of these establishments, if a corporation; it excludes payments to the proprietor or partners, if an unincorporated concern. Respondents were told that in reporting they could follow the definition of payrolls used for calculating the Federal withholding tax.

**Man-Hours of Production Workers**—This total relates to production-worker man-hours worked or paid for at the plant including actual overtime hours (not straight-time equivalent hours). It excludes hours paid for vacation, holidays, or sick leave when the employee was not at the plant.

**Cost of Materials**—The term "Cost of Materials" refers to charges actually paid or payable for items consumed or put into production during the year, including freight and other direct charges incurred by the establishment in acquiring these materials. It includes the cost of materials or fuel consumed regardless of

whether these items were purchased by the establishment from other companies, transferred to it from other establishments of the same company, or withdrawn from inventory during the year. The establishment was requested to value materials transferred from other parts of the company at its approximate market value, not at cost of production. The important components of this cost item are (a) all raw materials, semifinished goods, parts, components, containers, scrap, and supplies put into production or used as operating supplies and for repair and maintenance during the year; (b) electric energy purchased; (c) fuels consumed for heat, power, or the generation of electricity; (d) work done by others on materials or parts furnished by manufacturing establishments (contract work); and (e) products bought and resold in the same condition.

**Value of Shipments**—The value of shipments is the received or receivable net selling value, f.o.b. plant (exclusive of freight and taxes), of all products shipped, both primary and secondary, as well as all miscellaneous receipts such as receipts for contract work performed for others, installation and repair, sales of scrap, and sale of products bought and resold without further processing. Included are all items made by the establishment or for it under contract from materials owned by it whether sold, transferred to other plants of the same company, or shipped on consignment. The net selling value of products made in one plant on a contract basis from materials owned by another was reported by the plant providing the materials.

In the case of multiunit companies, the manufacturer was requested to report the value of products transferred to other establishments of the same company at full economic value; i.e., to include not only the direct costs of production but also a reasonable proportion of "all other costs" (including company overhead) and profit.

**Duplication in Cost of Materials and Value of Products**—The aggregate cost of materials and value-of-shipments figures for industry groups and for all manufacturing industries may include large amounts of duplication since the products of some industries are used as materials by others. With some important exceptions, such as motor vehicles and parts, this duplication is not significant within individual industries but arises from the addition of the totals of related industries in successive stages of the production of a finished manufactured product. Examples are the addition of flour mills to bakeries in the food group and the addition of pulp mills to paper mills in the paper and allied products group of industries. Esti-



mates of this duplication indicate that the value of manufactured products exclusive of such duplication—the value of finished manufactures—approximates two-thirds of the total value of products.

Prior to 1962, the Bureau of the Census did not publish figures for cost of materials or value of shipments if they contained significant duplication. Effective with the 1962 annual survey these figures were shown at all industry levels for the United States to meet the requests for their use in studies in which the presence of an indeterminate amount of duplication is not a limiting factor. However, they are appropriately footnoted. Effective with the 1964 annual survey, these industry group totals are also shown at the State, standard metropolitan statistical area, and large-county level.

Even where there is no significant amount of duplication, value-of-shipments figures are deficient as measures of the relative economic importance of individual manufacturing industries or geographic areas because of the wide variation in ratio of materials, labor, and other processing costs to value of shipments among industries.

**Value Added by Manufacture**—This measure of manufacturing activity is derived by subtracting the cost of materials, supplies, containers, fuel, purchased electricity, and cost of resales contract work from the value of shipments for products manufactured plus resales and receipts for services rendered. The result of this calculation is adjusted by the net change in finished goods and work-in-process inventories between the beginning and end of the year. (In the few industries that report value of production rather than value of shipments, only changes in work-in-process inventories are used to adjust value added. In the shipbuilding and repairing industry, no inventory adjustment is made.)

“Value added” avoids the duplication in the value of shipments figure which results from the use of products of some establishments as materials by others. Value added is considered to be the best value measure available for comparing the relative economic importance of manufacturing among industries and geographic areas.

**Expenditures for Plant and Equipment**—Manufacturing establishments in operation and establishments under construction but not yet in operation, were asked to report their expenditures for (a) permanent additions and major alterations to the manufacturing establishment, and (b) new machinery and equipment used for replacement purposes and additions to plant capacity if they are of the type for which depreciation accounts are ordinarily maintained.

These totals exclude expenditures for new facilities and equipment leased from nonmanufacturing concerns; new facilities owned by the Federal Government but operated under contract by private companies; and plant and equipment furnished to the manufacturer by communities and nonprofit organizations. Expenditures for used plant and equipment (although reported in the census), expenditures for land, and cost of maintenance and repairs charged as current operating expense are also omitted from the figures for new capital expenditures.

**Central Administrative Offices and Auxiliary Units**—In the 1972 census as in previous years, respondents were asked to file separate reports for central administrative offices or auxiliary units which were (1) at different locations from the establishments served or, (2) at the same location as one of these establishments but were not operated as an integral part thereof and served two or more establishments. The functions of employees in central administrative offices include general company policy determination, planning and management (that is, company purchasing, accounting, general engineering, direction of company personnel matters, and legal and patent matters). Auxiliaries are storage facilities, garages, repair shops, purchasing offices, sales promotion offices, and research laboratories serving the plants or central management of the company.

**Standard Metropolitan Statistical Areas**—Standard metropolitan statistical areas (SMSA) are integrated economic and social units with a large volume of daily travel and communication between the central city and outlying parts of the area.<sup>1</sup> Each area (except in New England) consists of one whole county or more. An area may contain not only highly industrialized counties but also adjoining counties which, though primarily residential in character, contribute significantly to the industrial counties' labor force and are socially and economically integrated with the central city. These areas are defined by the Federal Committee on Standard Metropolitan Statistical Areas of the Office of Management and Budget for general-purpose use throughout the Federal Government in presenting economic and social data. In the New England States, similar intergration criteria are applied in defining

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<sup>1</sup> Each standard metropolitan statistical area must include either (1) a city with 50,000 or more inhabitants, or (2) a city having a population of at least 25,000 which (a) with the addition of the population of contiguous places has a population density of at least 1,000 persons per square mile; (b) constitutes, for general economic and social purposes, a single community with a combined population of at least 50,000; and (c) includes a total population of at least 75,000 in the county or counties in which the city and contiguous places are located.



SMSA's on a city and town basis because towns rather than counties are regarded as the significant unit in this region of the country.

The requirement that each SMSA consist of county units (except in New England) sometimes results in the inclusion in an area of considerable amount of territory which would not ordinarily be considered "metropolitan," much less "industrial." It is recognized that metropolitan areas could be more accurately defined in terms of smaller area segments such as minor civil

divisions, but the usefulness of areas so defined would be limited by the fact that many types of economic and social data are available only on a county basis.

Each SMSA is designated by the name of the principal city of the area. In addition to the name of the principal city, the area title may include one or two additional city names.

The data for SMSA's which changed definition since the 1967 census have not been retabulated on the new basis for years prior to 1972.

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# PRELIMINARY REPORT

# 1972 CENSUS OF MANUFACTURES

## AREA SERIES

MC72(P)-S37

Issued March 1974

U. S. DEPARTMENT OF COMMERCE • Social and Economic Statistics Administration • BUREAU OF THE CENSUS

## Oklahoma

Value added by manufacturing in 1972 in the State of Oklahoma amounted to \$2,242 million, a 22-percent increase from 1971 and a 67-percent increase from 1967.

This report presents preliminary results from the 1972 Census of Manufactures for the State, its Standard Metropolitan Statistical Areas, and its counties.

Data are provided for industry groups within the State. Historical data, back to 1958, are included for the State as a whole,

and 1967 figures on employment and value added are provided for the smaller areas.

The figures in this report have been subjected to only preliminary review and must be regarded as approximations of the final census figures. No adjustments have been made in the value figures for changes in price level.

For an explanation of the terms used in the tables, see the appendix at the end of this report.

TABLE 1. General Statistics for the State: 1972 and Earlier Years

(See appendix, Explanation of Terms)

Year	Establishments		All employees <sup>1</sup>		Production workers			Value added by manufacture	Cost of materials <sup>2</sup>	Value of shipments <sup>2</sup>	Capital expenditures, new
	Total	With 20 employees or more	Number	Payroll	Number	Man-hours	Wages				
	(number)	(number)	(1,000)	(million dollars)	(1,000)	(millions)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(million dollars)
OKLAHOMA											
1972 Census .....	3,008	881	141.7	1,188.5	93.9	183.2	653.8	2,241.9	3,103.3	5,293.0	225.6
1971 ASM .....	(NA)	(NA)	132.2	1,024.0	88.2	173.5	567.4	1,834.4	2,719.0	4,553.7	158.4
1970 ASM .....	(NA)	(NA)	131.0	974.4	89.1	176.9	552.5	1,766.3	2,561.8	4,293.0	146.1
1969 ASM .....	(NA)	(NA)	129.2	912.0	87.3	171.2	513.8	1,595.4	2,314.2	3,872.0	130.9
1968 ASM .....	(NA)	(NA)	123.5	835.4	82.6	163.8	466.4	1,477.6	2,158.6	3,599.9	84.1
1967 Census .....	2,611	745	117.7	764.2	78.7	157.8	423.0	1,346.2	1,962.7	3,292.3	80.9
1966 ASM .....	(NA)	(NA)	110.1	677.9	73.8	151.7	381.4	1,241.9	1,844.9	3,049.3	70.6
1965 ASM .....	(NA)	(NA)	102.5	607.3	68.9	140.6	340.9	1,101.1	1,682.6	2,771.4	66.7
1964 ASM .....	(NA)	(NA)	99.1	579.5	65.6	134.1	312.5	1,032.4	1,570.0	2,598.1	62.0
1963 Census .....	2,575	648	97.7	551.7	64.2	130.1	295.0	978.8	(NA)	(NA)	63.6
1962 ASM .....	(NA)	(NA)	90.9	479.3	58.7	117.3	263.3	825.9	(NA)	(NA)	46.5
1961 ASM .....	(NA)	(NA)	90.6	463.7	58.6	116.4	253.5	811.3	(NA)	(NA)	44.8
1960 ASM .....	(NA)	(NA)	92.2	464.5	58.8	119.2	252.2	801.0	(NA)	(NA)	65.7
1959 ASM .....	(NA)	(NA)	92.4	464.8	60.1	121.6	256.0	772.9	(NA)	(NA)	85.1
1958 Census .....	2,409	572	91.6	446.4	59.7	118.4	248.5	725.0	(NA)	(NA)	61.9

Note: "ASM" data are based on a representative sample of manufacturing establishments canvassed in the Annual Survey of Manufactures. These estimates may differ from the results of a complete canvass of all manufacturing establishments. The standard errors associated with these estimates are published in the annual survey of manufactures volumes for this period. For comparative purposes, the 1972 ASM estimate for the State of Oklahoma was 139 thousand employees, and \$2,206 million in value added with corresponding standard error of estimate of 3 and 1.

(NA) Not available.

<sup>1</sup>Includes employment and payroll at central administrative offices and auxiliary units. (For a definition of these units, see appendix.)

<sup>2</sup>The total cost of materials and value of shipments may include extensive duplication arising from shipments between establishments in the same industry classification. (For a more complete explanation, see appendix.)

TABLE 2. General Statistics for the State, Standard Metropolitan Statistical Areas, and Counties: 1972 and 1967

(See appendix, Explanation of Terms)

State, standard metropolitan statistical areas, and counties <sup>1</sup>	1972											1967	
	Establishments		All employees <sup>2</sup>		Production workers			Value added by manufacture	Cost of materials <sup>3</sup>	Value of shipments <sup>3</sup>	Capital expenditures, 1967	All employees	Value added by manufacture
	Total	With 20 employees or more	Number	Payroll	Number	Man-hours	Wages	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(1,000)	(million dollars)
	(number)	(number)	(1,000)	(million dollars)	(1,000)	(million)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(1,000)	(million dollars)
OKLAHOMA, TOTAL . . . . .	3 008	881	141.7	1 188.5	93.9	183.2	653.8	2 241.9	3 103.3	5 293.0	225.6	117.7	1 346.2
STANDARD METROPOLITAN STATISTICAL AREAS <sup>4</sup>													
FORT SMITH . . . . .	283	114	18.6	118.1	15.2	29.5	85.6	275.6	336.4	616.9	11.5	14.1	164.1
PORTION IN ARKANSAS . . . . .	225	105	17.5	112.0	14.3	27.8	81.0	258.8	325.1	588.8	10.8	13.6	158.9
PORTION IN OKLAHOMA . . . . .	58	9	1.1	6.1	.9	1.7	4.6	16.8	11.3	28.1	.7	.5	5.3
LAWTON . . . . .	50	14	1.4	8.6	1.0	1.8	5.2	18.8	22.7	41.5	.7	1.2	11.5
OKLAHOMA CITY . . . . .	845	247	40.2	341.2	25.6	50.1	184.5	765.0	822.7	1 559.1	61.8	29.3	323.3
TULSA . . . . .	947	294	44.7	402.4	28.8	57.0	216.9	701.7	876.2	1 563.1	58.9	41.9	514.6
COUNTIES													
ADAIR . . . . .	13	3	.8	3.1	.6	1.1	2.4	7.5	15.8	23.2	.7	.5	2.9
BECKHAM . . . . .	13	3	.4	1.6	.3	.6	1.3	3.2	6.7	9.9	.2	.2	2.1
BLAINE . . . . .	15	3	.6	4.0	.5	1.1	3.0	10.7	12.7	23.4	1.0	(D)	(D)
BRYAN . . . . .	26	11	.8	5.8	.7	1.4	4.1	12.9	25.9	38.0	.7	.5	6.2
CARTER . . . . .	44	17	2.5	18.7	1.9	3.8	12.2	32.4	83.6	119.6	(D)	1.4	16.3
CHOCTAW . . . . .	13	3	.3	1.5	.3	.6	1.2	3.1	3.7	6.9	.3	.4	2.6
COMANCHE . . . . .	50	14	1.4	8.6	1.0	1.8	5.2	18.8	22.7	41.5	.7	1.2	11.5
CRAIG . . . . .	14	5	.4	2.3	.3	.6	1.5	7.0	5.1	11.4	.7	.2	.2
CREEK . . . . .	58	19	2.3	17.0	1.9	3.9	12.8	36.6	27.9	63.4	3.1	1.9	20.7
CUSTER . . . . .	24	8	.6	3.1	.4	.9	1.9	4.1	10.7	14.3	.7	.5	6.7
DELAWARE . . . . .	11	3	.3	1.1	.3	.5	1.0	1.7	6.3	7.9	.1	(D)	(D)
GARFIELD . . . . .	61	13	2.2	19.4	1.1	2.3	8.9	46.5	125.2	172.1	3.7	2.4	39.0
GARVIN . . . . .	27	11	.9	5.7	.8	1.3	4.6	10.5	53.8	64.0	1.5	(D)	(D)
GRADY . . . . .	55	19	1.6	9.8	1.3	2.6	7.1	18.5	26.3	44.1	2.1	1.0	8.4
KAY . . . . .	58	18	5.2	53.8	2.4	4.5	19.5	55.8	228.0	282.3	10.5	5.3	70.5
LE FLORE . . . . .	30	5	.8	4.1	.6	1.2	3.2	6.4	5.8	12.1	.2	.4	3.4
LINCOLN . . . . .	22	6	.7	3.9	.6	1.2	3.3	7.2	16.0	22.8	.5	(D)	(D)
LOGAN . . . . .	20	3	.8	5.1	.6	1.3	3.2	10.4	11.4	21.2	.4	.5	3.0
MAYES . . . . .	34	14	1.2	10.2	.9	2.0	7.4	29.0	30.5	58.9	6.2	.9	15.7
MUSKOGEE . . . . .	73	27	3.6	26.4	2.8	5.5	18.6	64.4	62.5	125.0	3.8	3.3	46.9
OKFUSKEE . . . . .	7	4	.6	2.4	.5	.8	2.0	2.9	1.0	3.8	.1	(D)	(D)
OKLAHOMA . . . . .	724	217	38.1	328.7	24.4	47.8	179.1	732.4	765.5	1 473.4	35.1	28.1	313.5
OKMULGEE . . . . .	33	10	1.8	17.1	1.5	3.0	13.9	32.9	41.2	74.9	2.3	2.1	27.6
OTTAWA . . . . .	46	17	3.6	28.9	3.0	5.7	23.4	75.2	73.1	149.2	5.0	2.9	56.5
PAYNE . . . . .	34	10	1.2	8.8	.9	2.0	6.6	23.5	48.3	71.4	1.1	.9	11.8
PITTSBURG . . . . .	21	10	1.2	6.1	.9	1.7	3.6	8.7	11.9	19.9	.3	1.5	13.2
PONTOTOC . . . . .	33	11	1.6	11.3	1.3	2.7	8.6	25.6	31.6	56.9	1.5	1.2	13.1
POTTAWATOMIE . . . . .	35	13	.9	5.5	.6	1.2	3.3	11.7	24.5	36.2	.6	.7	7.5
SEMINOLE . . . . .	32	12	1.5	7.2	1.3	2.5	5.7	12.5	23.5	36.3	.5	.9	8.1
SEQUOYAH . . . . .	28	4	.3	2.0	.3	.5	1.4	10.4	5.5	16.0	.5	.1	1.9
STEPHENS . . . . .	36	6	2.5	22.0	2.0	4.0	16.3	37.7	106.0	138.2	3.9	(D)	(D)
TILLMAN . . . . .	15	5	.7	3.4	.7	1.2	3.0	5.7	3.1	8.7	.4	.3	2.2
TULSA . . . . .	767	242	36.7	334.9	24.0	47.5	184.7	740.0	623.8	1 363.8	27.4	39.3	487.1
WASHINGTON . . . . .	32	13	7.4	87.5	1.6	3.1	11.6	31.5	38.5	70.3	2.4	7.4	23.4
WOODWARD . . . . .	13	2	.5	2.4	.5	.9	2.0	3.8	3.8	7.6	.3	.1	1.0

(D) Withheld to avoid disclosing figures for individual companies.

<sup>1</sup>Some counties were withheld from publication in order to (a) avoid disclosing figures for individual companies or (b) permit further checking of the figures for smaller counties. Additional detail will appear in the final report for this State.<sup>2</sup>Includes employment and payroll at central administrative offices and auxiliary units. (For a definition of these units, see appendix.)<sup>3</sup>The total cost of materials and value of shipments may include extensive duplication arising from shipments between establishments in the same industry classification. (For a more complete explanation, see appendix.)<sup>4</sup>The standard metropolitan statistical areas in this State are defined as follows:

FORT SMITH, AR-OK, SMSA: Consists of Crawford and Sebastian Counties, AR, and Le Flore and Sequoyah Counties, OK.

LAWTON SMSA: Coextensive with Comanche County, OK.

OKLAHOMA CITY SMSA: Consists of Canadian, Cleveland, McClain, Oklahoma, and Pottawatomie Counties, OK.

TULSA SMSA: Consists of Creek, Mayes, Osage, Rogers, Tulsa, and Wagoner Counties, OK.



TABLE 3. General Statistics for the State, by Industry Groups and Industries: 1972 and 1967

(See appendix, Explanation of Terms)

Code	Industry	1972											1967	
		Establishments		All employees		Production workers			Value added by manufacture	Cost of materials <sup>1</sup>	Value of shipments <sup>1</sup>	Capital expenditures, new	All employees	Value added by manufacture
		Total	With 20 employees or more	Number	Payroll	Number	Man-hours	Wages						
		(number)	(number)	(1,000)	(million dollars)	(1,000)	(million)	(million dollars)					(1,000)	(million dollars)
	ALL INDUSTRIES, TOTAL <sup>2</sup> . . . . .	3 008	881	141.7	1 188.5	93.9	183.2	653.8	2 241.9	3 103.3	5 293.0	225.6	117.7	1 346.2
20	FOOD AND KINDRED PRODUCTS . . . . .	330	138	14.3	105.1	9.1	18.7	60.0	238.0	688.0	924.3	15.8	13.8	176.4
201	MEAT PRODUCTS . . . . .	66	27	3.4	28.5	2.8	5.8	20.6	57.1	288.7	344.9	1.8	3.1	38.3
2011	MEATPACKING PLANTS . . . . .	48	17	2.1	22.0	1.6	3.6	15.3	45.4	243.5	287.4	1.1	EE	(D)
2016	POULTRY DRESSING PLANTS . . . . .	6	5	1.0	4.4	1.0	1.8	4.1	7.1	28.5	36.6	.7	(NA)	(NA)
202	DAIRY PRODUCTS . . . . .	32	18	1.7	13.2	.7	1.6	5.7	30.6	96.5	127.2	2.4	2.6	36.0
2026	FLUID MILK . . . . .	17	13	1.4	11.3	.5	1.2	4.5	25.3	70.5	95.9	2.2	2.4	33.0
203	PRESERVED FRUITS AND VEGETABLES . . . . .	21	11	1.7	8.6	1.4	2.8	6.8	18.7	35.7	54.4	1.9	(NA)	(NA)
2033	CANNED FRUITS AND VEGETABLES . . . . .	10	5	1.1	4.3	.9	1.5	3.4	8.5	8.3	16.9	.6	.6	4.2
204	GRAIN MILL PRODUCTS . . . . .	46	22	1.4	11.1	1.0	2.3	7.4	26.1	130.0	155.9	3.3	1.4	21.9
205	BAKERY PRODUCTS . . . . .	40	13	1.9	15.7	1.0	2.0	7.9	37.5	29.4	66.8	1.1	1.9	23.3
207	FATS AND OILS . . . . .	18	8	.5	4.0	.3	.8	2.7	7.3	34.4	41.5	.9	(NA)	(NA)
208	BEVERAGES . . . . .	51	26	2.1	13.2	.7	1.4	3.6	29.9	28.5	58.1	2.2	EE	(D)
22	TEXTILE MILL PRODUCTS . . . . .	15	8	1.6	10.6	1.4	3.0	8.3	25.6	44.5	68.9	2.8	CC	(D)
227	FLOOR COVERING MILLS . . . . .	6	4	.8	6.3	.7	1.6	4.7	17.3	31.2	47.3	1.0	CC	(D)
23	APPAREL, OTHER TEXTILE PRODUCTS . . . . .	107	59	10.2	43.3	9.2	16.9	36.1	73.2	70.9	141.3	2.5	6.5	40.7
232	MEN'S AND BOYS' FURNISHINGS . . . . .	26	22	5.3	22.1	5.0	9.3	20.2	34.2	32.4	65.7	1.4	3.6	24.0
2327	MEN'S AND BOYS' SEPARATE TROUSERS . . . . .	8	8	2.0	8.6	1.9	3.7	8.1	11.7	1.4	13.2	.2	1.4	6.0
2328	MEN'S AND BOYS' WORK CLOTHING . . . . .	10	10	2.2	9.0	1.9	3.6	7.7	13.0	20.6	33.2	.9	EE	(D)
233	WOMEN'S, AND MISSES' OUTERWEAR . . . . .	19	14	1.9	7.1	1.7	2.9	6.0	9.5	5.9	15.4	.1	CC	(D)
238	MISC. APPAREL AND ACCESSORIES . . . . .	7	5	.6	3.6	.6	1.1	2.2	8.8	6.6	14.8	.2	HE	(D)
239	MISC. FABRICATED TEXTILE PRODUCTS . . . . .	39	9	1.1	5.4	.9	1.7	3.8	11.0	18.5	28.1	.5	.4	3.3
24	LUMBER AND WOOD PRODUCTS . . . . .	155	45	4.6	29.1	3.9	7.2	22.8	73.8	93.2	167.0	11.4	(NA)	(NA)
242	SAWMILLS AND PLANING MILLS . . . . .	47	9	1.4	9.1	1.3	2.4	7.9	31.5	31.1	63.3	8.3	1.1	6.3
2421	SAWMILLS AND PLANING MILLS, GENERAL . . . . .	40	8	1.3	8.8	1.2	2.3	7.7	31.0	30.6	62.3	(D)	EE	(D)
243	MILLWORK, PLYWOOD, STRUC. MEMBERS . . . . .	48	12	.9	6.8	.8	1.7	5.3	14.6	15.1	29.7	1.3	(NA)	(NA)
245	WOOD BUILDINGS AND MOBILE HOMES . . . . .	14	13	1.6	9.7	1.3	2.1	6.7	20.9	37.9	58.5	.6	(NA)	(NA)
249	MISCELLANEOUS WOOD PRODUCTS . . . . .	30	8	.5	2.7	.4	.8	2.2	5.5	7.2	12.3	1.1	(NA)	(NA)
25	FURNITURE AND FIXTURES . . . . .	89	17	2.1	14.2	1.8	3.5	11.1	32.1	30.6	60.3	4.5	1.5	13.0
251	HOUSEHOLD FURNITURE . . . . .	59	13	1.5	8.8	1.3	2.4	6.7	23.6	23.2	45.5	3.5	(NA)	(NA)
2511	WOOD HOUSEHOLD FURNITURE . . . . .	21	4	.9	5.8	.8	1.6	4.5	17.0	14.8	30.7	3.2	(NA)	(NA)
2512	UPHOLSTERED HOUSEHOLD FURNITURE . . . . .	17	5	.3	1.7	.3	.5	1.3	3.2	4.2	7.3	.1	(NA)	(NA)
26	PAPER AND ALLIED PRODUCTS . . . . .	28	16	1.8	16.5	1.4	3.0	12.1	45.6	73.2	118.5	(D)	1.0	18.7
265	PAPERBOARD CONTAINERS AND BOXES . . . . .	14	10	.9	6.9	.8	1.5	5.1	14.5	23.4	37.7	.8	.5	8.0
27	PRINTING AND PUBLISHING . . . . .	506	72	8.1	62.0	4.9	9.2	33.6	131.4	60.7	191.2	11.0	7.0	80.2
2711	NEWSPAPERS . . . . .	188	36	4.5	32.3	2.3	3.9	14.9	68.7	22.4	91.1	7.1	4.4	45.5
275	COMMERCIAL PRINTING . . . . .	234	21	1.9	14.9	1.5	3.1	11.1	30.5	21.1	51.1	2.8	(NA)	(NA)
2751	COMMERCIAL PRINTING, LETTERPRESS . . . . .	148	7	.8	5.4	.6	1.2	3.8	10.8	7.4	18.1	.7	(NA)	(NA)
2752	COMMERCIAL PRINTING, LITHOGRAPHIC . . . . .	80	13	1.0	8.8	.8	1.7	6.6	16.7	12.1	28.7	1.9	(NA)	(NA)
2761	MANIFOLD BUSINESS FORMS . . . . .	8	5	.7	5.9	.5	1.2	3.8	12.5	11.1	23.4	.7	.3	3.7
281	INDUSTRIAL INORGANIC CHEMICALS . . . . .	13	5	.5	4.5	.3	.6	2.4	14.2	7.8	21.4	.8	(NA)	(NA)
287	AGRICULTURAL CHEMICALS . . . . .	10	2	.3	2.4	.2	.4	1.7	8.8	5.0	13.2	.6	(NA)	(NA)
29	PETROLEUM AND COAL PRODUCTS . . . . .	42	21	5.0	51.3	4.0	7.9	38.8	104.1	764.3	880.5	32.1	5.1	143.2
295	PAVING AND ROOFING MATERIALS . . . . .	16	6	.5	4.0	.4	.9	2.8	9.4	14.7	23.9	.4	88	(D)
2952	ASPHALT FELTS AND COATINGS . . . . .	4	3	.3	2.7	.3	.6	2.0	5.9	8.2	14.1	.2	AA	(D)
30	RUBBER AND MISC. PLASTICS PROD . . . . .	76	25	6.8	59.0	5.4	10.5	44.1	140.9	133.6	274.3	26.3	(NA)	(NA)
3011	TIRES AND INNER TUBES . . . . .	7	5	4.3	41.6	3.5	6.6	32.4	102.3	99.9	202.4	21.4	EE	(D)
32	STONE CLAY, AND GLASS PRODUCTS . . . . .	237	60	8.3	69.6	6.8	14.0	52.8	168.3	97.8	263.0	16.3	6.9	98.9
322	GLASS, GLASSWARE, PRESSED OR BLOWN . . . . .	10	7	3.2	26.3	2.8	5.6	21.7	65.1	25.1	86.9	5.0	2.6	34.3
325	STRUCTURAL CLAY PRODUCTS . . . . .	11	10	.4	2.6	.4	.8	2.1	5.5	2.3	7.8	.4	.4	3.7
327	CONCRETE, GYPSUM, PLASTER PRODUCTS . . . . .	161	25	2.5	20.4	1.8	4.0	13.4	47.2	49.3	96.5	4.6	2.1	30.8
3272	CONCRETE PRODUCTS, NEC . . . . .	33	6	.5	5.3	.4	1.0	3.1	10.2	6.6	16.7	.5	.4	5.6
3273	READY-MIXED CONCRETE . . . . .	109	14	1.4	10.9	.9	2.0	7.0	24.9	36.0	60.9	3.0	1.1	14.6
329	MISC. NONMETALLIC MINERAL PRODUCTS . . . . .	23	6	.4	2.9	.3	.7	1.8	5.6	5.4	11.0	.5	(NA)	(NA)
332	IRON AND STEEL FOUNDRIES . . . . .	14	12	1.3	9.7	1.1	2.2	7.7	16.6	5.8	22.2	1.1	1.2	10.6
336	NONFERROUS FOUNDRIES . . . . .	13	7	.4	2.7	.3	.6	1.9	5.9	3.6	9.5	.3	.2	2.4
34	FABRICATED METAL PRODUCTS . . . . .	323	115	13.8	112.0	9.9	18.4	67.0	221.9	204.9	420.8	10.9	(NA)	(NA)
344	FABRICATED STRUCTURAL METAL PROD . . . . .	152	70	9.6	79.1	6.7	12.7	46.7	152.0	152.4	301.1	(D)	9.5	123.3
3441	FABRICATED STRUCTURAL METAL PRODUCTS . . . . .	30	17	3.0	23.1	2.2	4.1	14.3	40.7	44.8	82.7	(D)	3.4	31.8
3443	FABRICATED PLATEWORK (BOILERS SHOP) . . . . .	42	32	4.0	35.5	2.7	5.3	20.3	71.8	76.4	148.8	3.8	4.1	68.5
3444	SHEET METALWORK . . . . .	31	5	.3	2.6	.3	.5	1.8	5.5	5.7	11.1	(D)	.3	3.7
349	MISC. FABRICATED METAL PRODUCTS . . . . .	74	25	2.5	21.3	1.7	3.2	12.0	47.4	36.2	81.3	2.6	(NA)	(NA)
3499	FABRICATED METAL PRODUCTS, NEC . . . . .	32	7	.5	3.6	.4	.8	2.6	7.5	6.3	13.8	.8	(NA)	(NA)
35	MACHINERY, EXCEPT ELECTRICAL . . . . .	483	119	22.6	206.0	14.7	29.5	110.1	474.6	419.4	864.9	44.5	15.0	184.3
352	FARM AND GARDEN MACHINERY . . . . .	28	7	.8	5.0	.6	1.1	3.3	14.2	12.1	24.5	.6	(NA)	(NA)
353	CONSTRUCTION AND RELATED MACHINERY . . . . .	79	34	8.0	75.3	5.4	11.3	43.9	154.8	180.2	321.9	7.2	6.4	80.2
355	SPECIAL INDUSTRY MACHINERY . . . . .	32	12	1.3	11.3	.9	1.7	6.8	26.7	15.9	42.0	.8	.7	13.0

See footnotes at end of table.

TABLE 3. General Statistics for the State, by Industry Groups and Industries: 1972 and 1967—Continued

(See appendix, Explanation of Terms)

Code	Industry	1972											1967	
		Establishments		All employees		Production workers			Value added by manufacture	Cost of materials <sup>1</sup>	Value of shipments <sup>1</sup>	Capital expenditures, new	All employees	Value added by manufacture
		Total (number)	With 20 employees or more (number)	Number (1,000)	Payroll (million dollars)	Number (1,000)	Man-hours (million)	Wages (million dollars)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(1,000)	(million dollars)
3559	SPECIAL INDUSTRY MACHINERY, NEC. . . .	24	10	1.1	9.5	0.8	1.5	5.5	22.6	13.3	35.3	0.7	CC	(D)
356	GENERAL INDUSTRIAL MACHINERY . . . .	60	22	4.5	37.5	3.0	5.9	21.8	69.2	65.0	131.7	4.2	3.5	47.3
359	MISC. MACHINERY, EXCEPT ELECTRICAL	214	22	1.8	14.3	1.5	2.9	10.6	27.0	11.2	38.0	1.4	(NA)	(NA)
36	ELECTRIC, ELECTRONIC EQUIPMENT . .	80	32	10.7	88.2	8.2	15.2	59.7	200.1	159.6	341.9	8.3	(NA)	(NA)
37	TRANSPORTATION EQUIPMENT . . . . .	137	45	8.6	77.5	6.5	13.0	50.8	148.7	115.0	269.9	4.3	(NA)	(NA)
37	MOTOR VEHICLES AND EQUIPMENT . . . .	60	18	2.8	21.2	2.2	4.3	14.4	53.3	47.6	100.2	2.4	2.0	21.3
--	ADMINISTRATIVE AND AUXILIARY . . . .	61	28	14.5	176.5	-	-	-	-	-	-	-	12.7	-

Note: The following symbols indicate employment size range for 1967:

AA less than 250 employees      EE 1,000 to 2,499 employees  
BB 250 to 499 employees      FF 2,500 employees and over  
CC 500 to 999 employees

- Represents zero. (NA) Not available. Because of a revision to this industry or industry group in the 1972 edition of the SIC manual, 1967 census data are not available on a comparable basis. (D) Withheld to avoid disclosing figures for individual companies.

<sup>1</sup>The total cost of materials and value of shipments for industry groups shown may include extensive duplication arising from shipments between establishments in the same industry classification. (For a more complete explanation, see appendix.)

<sup>2</sup>Includes figures for industry groups which have been withheld from publication in order to (a) avoid disclosing figures for individual companies or (b) permit further checking of figures for smaller industry groups. Additional detail will appear in the final report for this State.



## Appendix A. SCOPE AND COVERAGE

This report is one of a series presenting preliminary information, by State, from the 1972 Census of Manufactures. The data will be superseded in a final report which, in turn, will be included in *Volume III, Area Statistics, 1972 Census of Manufactures*. The final report will include a comprehensive discussion of the concepts and definitions used in the census.

The census of manufactures covers each manufacturing establishment in the United States with one paid employee or more; manufacturing establishments with no employees are excluded. Firms which operated more than one establishment were required to file a separate report for each location. Companies which engaged in distinctly different lines of activity at one location were asked to submit separate reports if the company records permitted such a separation and the activities were of significant size.

This report includes figures for administrative offices, warehouses, garages, or other auxiliary units which service manufacturing establishments.

In the 1972 census, the approximately 120,000 manufacturing establishments with fewer than 10 employees were excused from filing reports. Under special arrangements which safeguarded the confidentiality of both tax and census records, data on payrolls, sales, and industry classification from the administrative records of the Social Security Administration and the Internal Revenue Service were made available to the Census Bureau for use in the 1972 Economic Censuses (retail and wholesale trade, service industries, construction industries, manufactures, and mineral industries). Estimates for data other than payrolls and sales for these small establishments were constructed from industry averages. The effect on industry aggregates is slight in most industries. For manufacturing as a whole, these small establishments account for less than 3 percent of the payrolls and value added.

Establishments are classified by industry in accordance with industry definitions described in the 1972 edition of the Standard Industrial Classification (SIC) Manual. For 1972, the SIC was significantly revised and the comparability with prior year's data for some industries was significantly affected. The comparability at the 2- and 3-digit SIC levels was less affected. The final volumes of the 1972 Census of Manufactures will contain a table relating aggregates based on the 1972 SIC with aggregates derived from classifying establishments according to the 1967 SIC definitions.

As in earlier censuses, a number of small establishments may have been misclassified as to industry. However, such possible misclassifications have significant effect on *none* of the statistics except the number of establishments. As indicated above, report forms were not mailed to very small establishments (fewer than 10 employees). The industry classifications for these establishments were assigned on the basis of brief descriptions of the general activity of the establishment. Where the description is incomplete or there are relatively fine lines of demarcation among industries or between manufacturing and nonmanufacturing activity, the code assigned to an establishment could differ from that which would have been assigned on the basis of more complete product information. Therefore, the total establishment count for individual industries should be viewed as an approximation rather than a precise measurement. The counts for establishments with 20 employees or more are more reliable than the total number of establishments.

More detailed figures for this State will appear in the final census reports. Final reports will also include a comprehensive discussion of such concepts as "industry" and "establishment," as well as the various statistical items such as "employment," "value of shipments," and "value added." Similar preliminary and final reports will be issued for other States during the coming months. A series of preliminary summary reports showing U.S. totals for each manufacturing industry and for each State are being issued. Final industry reports and final area reports will be published during 1974.

Order forms describing the individual reports and listing their prices may be obtained from any U.S. Department of Commerce district office or from the Publications Distribution Section, Social and Economic Statistics Administration, Washington, D.C. 20233.

The 1972 Census of Manufactures is the 29th census of manufacturing establishments in the United States. For 1972, it was conducted jointly with the censuses of mineral industries, construction industries, retail trade, wholesale trade, and selected services under authority of Title 13 of the United States Code. Title 13 specifies that a census of manufactures be conducted every 5 years and, as amended, to cover years ending in "2" and "7". Title 13 also authorizes an annual sample survey of manufacturing establishments in interim years.



## Appendix B. EXPLANATION OF TERMS

*(For a more complete discussion of these terms and the method of compiling the Census of Manufactures, see the "Introduction" to the 1967 Census of Manufactures, Volume III).*

**All Employees**—All full-time and part-time employees on the payrolls of operating manufacturing establishments for any part of the pay period ending nearest the 12th of the months specified on the report form. Included are all persons on paid sick leave, paid holidays, and paid vacations during these pay periods. Officers of corporations are included as employees; proprietors and partners of unincorporated firms are excluded. The "all employee" number is the average number of production workers for the midmonth payroll period of March, May, August, and November plus the number of nonproduction employees in mid-March.

**Number of Production Workers**—Workers (up through the working foreman level) engaged in fabricating, processing, assembling, inspecting, receiving, packing, warehousing, shipping (but not delivering), and maintenance, repair, janitorial, and watchman services, product development, auxiliary production for plant's own use (e.g., powerplant), recordkeeping, and other closely associated services. Proprietors and partners are excluded.

**Payroll**—This item includes all forms of compensation such as salaries, wages, commissions, dismissal pay, bonuses, vacation and sick leave pay, and compensation in kind, prior to such deductions as employees' Social Security contributions, withholding taxes, group insurance, union dues, and savings bonds. The total includes salaries of officers of these establishments, if a corporation; it excludes payments to the proprietor or partners, if an unincorporated concern. Respondents were told that in reporting they could follow the definition of payrolls used for calculating the Federal withholding tax.

**Man-Hours of Production Workers**—This total relates to production-worker man-hours worked or paid for at the plant including actual overtime hours (not straight-time equivalent hours). It excludes hours paid for vacation, holidays, or sick leave when the employee was not at the plant.

**Cost of Materials**—The term "Cost of Materials" refers to charges actually paid or payable for items consumed or put into production during the year, including freight and other direct charges incurred by the establishment in acquiring these materials. It includes the cost of materials or fuel consumed regardless of

whether these items were purchased by the establishment from other companies, transferred to it from other establishments of the same company, or withdrawn from inventory during the year. The establishment was requested to value materials transferred from other parts of the company at its approximate market value, not at cost of production. The important components of this cost item are (a) all raw materials, semifinished goods, parts, components, containers, scrap, and supplies put into production or used as operating supplies and for repair and maintenance during the year; (b) electric energy purchased; (c) fuels consumed for heat, power, or the generation of electricity; (d) work done by others on materials or parts furnished by manufacturing establishments (contract work); and (e) products bought and resold in the same condition.

**Value of Shipments**—The value of shipments is the received or receivable net selling value, f.o.b. plant (exclusive of freight and taxes), of all products shipped, both primary and secondary, as well as all miscellaneous receipts such as receipts for contract work performed for others, installation and repair, sales of scrap, and sale of products bought and resold without further processing. Included are all items made by the establishment or for it under contract from materials owned by it whether sold, transferred to other plants of the same company, or shipped on consignment. The net selling value of products made in one plant on a contract basis from materials owned by another was reported by the plant providing the materials.

In the case of multiunit companies, the manufacturer was requested to report the value of products transferred to other establishments of the same company at full economic value; i.e., to include not only the direct costs of production but also a reasonable proportion of "all other costs" (including company overhead) and profit.

**Duplication in Cost of Materials and Value of Products**—The aggregate cost of materials and value-of-shipments figures for industry groups and for all manufacturing industries may include large amounts of duplication since the products of some industries are used as materials by others. With some important exceptions, such as motor vehicles and parts, this duplication is not significant within individual industries but arises from the addition of the totals of related industries in successive stages of the production of a finished manufactured product. Examples are the addition of flour mills to bakeries in the food group and the addition of pulp mills to paper mills in the paper and allied products group of industries. Esti-



mates of this duplication indicate that the value of manufactured products exclusive of such duplication—the value of finished manufactures—approximates two-thirds of the total value of products.

Prior to 1962, the Bureau of the Census did not publish figures for cost of materials or value of shipments if they contained significant duplication. Effective with the 1962 annual survey these figures were shown at all industry levels for the United States to meet the requests for their use in studies in which the presence of an indeterminate amount of duplication is not a limiting factor. However, they are appropriately footnoted. Effective with the 1964 annual survey, these industry group totals are also shown at the State, standard metropolitan statistical area, and large-county level.

Even where there is no significant amount of duplication, value-of-shipments figures are deficient as measures of the relative economic importance of individual manufacturing industries or geographic areas because of the wide variation in ratio of materials, labor, and other processing costs to value of shipments among industries.

**Value Added by Manufacture**—This measure of manufacturing activity is derived by subtracting the cost of materials, supplies, containers, fuel, purchased electricity, and cost of resales contract work from the value of shipments for products manufactured plus resales and receipts for services rendered. The result of this calculation is adjusted by the net change in finished goods and work-in-process inventories between the beginning and end of the year. (In the few industries that report value of production rather than value of shipments, only changes in work-in-process inventories are used to adjust value added. In the shipbuilding and repairing industry, no inventory adjustment is made.)

“Value added” avoids the duplication in the value of shipments figure which results from the use of products of some establishments as materials by others. Value added is considered to be the best value measure available for comparing the relative economic importance of manufacturing among industries and geographic areas.

**Expenditures for Plant and Equipment**—Manufacturing establishments in operation and establishments under construction but not yet in operation, were asked to report their expenditures for (a) permanent additions and major alterations to the manufacturing establishment, and (b) new machinery and equipment used for replacement purposes and additions to plant capacity if they are of the type for which depreciation accounts are ordinarily maintained.

These totals exclude expenditures for new facilities and equipment leased from nonmanufacturing concerns; new facilities owned by the Federal Government but operated under contract by private companies; and plant and equipment furnished to the manufacturer by communities and nonprofit organizations. Expenditures for used plant and equipment (although reported in the census), expenditures for land, and cost of maintenance and repairs charged as current operating expense are also omitted from the figures for new capital expenditures.

**Central Administrative Offices and Auxiliary Units**—In the 1972 census as in previous years, respondents were asked to file separate reports for central administrative offices or auxiliary units which were (1) at different locations from the establishments served or, (2) at the same location as one of these establishments but were not operated as an integral part thereof and served two or more establishments. The functions of employees in central administrative offices include general company policy determination, planning and management (that is, company purchasing, accounting, general engineering, direction of company personnel matters, and legal and patent matters). Auxiliaries are storage facilities, garages, repair shops, purchasing offices, sales promotion offices, and research laboratories serving the plants or central management of the company.

**Standard Metropolitan Statistical Areas**—Standard metropolitan statistical areas (SMSA) are integrated economic and social units with a large volume of daily travel and communication between the central city and outlying parts of the area.<sup>1</sup> Each area (except in New England) consists of one whole county or more. An area may contain not only highly industrialized counties but also adjoining counties which, though primarily residential in character, contribute significantly to the industrial counties' labor force and are socially and economically integrated with the central city. These areas are defined by the Federal Committee on Standard Metropolitan Statistical Areas of the Office of Management and Budget for general-purpose use throughout the Federal Government in presenting economic and social data. In the New England States, similar intergration criteria are applied in defining

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<sup>1</sup> Each standard metropolitan statistical area must include either (1) a city with 50,000 or more inhabitants, or (2) a city having a population of at least 25,000 which (a) with the addition of the population of contiguous places has a population density of at least 1,000 persons per square mile; (b) constitutes, for general economic and social purposes, a single community with a combined population of at least 50,000; and (c) includes a total population of at least 75,000 in the county or counties in which the city and contiguous places are located.

SMSA's on a city and town basis because towns rather than counties are regarded as the significant unit in this region of the country.

The requirement that each SMSA consist of county units (except in New England) sometimes results in the inclusion in an area of considerable amount of territory which would not ordinarily be considered "metropolitan," much less "industrial." It is recognized that metropolitan areas could be more accurately defined in terms of smaller area segments such as minor civil

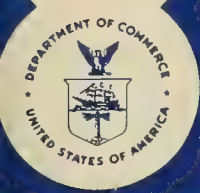
divisions, but the usefulness of areas so defined would be limited by the fact that many types of economic and social data are available only on a county basis.

Each SMSA is designated by the name of the principal city of the area. In addition to the name of the principal city, the area title may include one or two additional city names.

The data for SMSA's which changed definition since the 1967 census have not been retabulated on the new basis for years prior to 1972.







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U. S. DEPARTMENT OF COMMERCE • Social and Economic Statistics Administration • BUREAU OF THE CENSUS

PRELIMINARY REPORT

# 1972 CENSUS OF MANUFACTURES

## AREA SERIES

### Oregon

Value added by manufacturing in 1972 in the State of Oregon amounted to \$3,471 million, a 24-percent increase from 1971 and a 68-percent increase from 1967.

This report presents preliminary results from the 1972 Census of Manufactures for the State, its Standard Metropolitan Statistical Areas, and its counties.

Data are provided for industry groups within the State. Historical data, back to 1958, are included for the State as a whole,

and 1967 figures on employment and value added are provided for the smaller areas.

The figures in this report have been subjected to only preliminary review and must be regarded as approximations of the final census figures. No adjustments have been made in the value figures for changes in price level.

For an explanation of the terms used in the tables, see the appendix at the end of this report.

TABLE 1. General Statistics for the State: 1972 and Earlier Years

(See appendix, Explanation of Terms)

Year	Establishments		All employees <sup>1</sup>		Production workers			Value added by manufacture	Cost of materials <sup>2</sup>	Value of shipments <sup>2</sup>	Capital expenditures, new
	Total	With 20 employees or more	Number	Payroll	Number	Man-hours	Wages				
	(number)	(number)	(1,000)	(million dollars)	(1,000)	(millions)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(million dollars)
OREGON											
1972 Census .....	4,618	1,431	176.2	1,599.9	140.0	269.1	1,157.1	3,471.2	4,049.1	7,553.5	276.3
1971 ASM .....	(NA)	(NA)	169.4	1,406.8	131.9	252.8	1,011.7	2,806.6	3,390.0	6,183.0	232.3
1970 ASM .....	(NA)	(NA)	169.2	1,292.6	131.8	249.5	929.8	2,508.2	3,041.0	5,521.6	226.1
1969 ASM .....	(NA)	(NA)	173.5	1,260.3	139.3	266.6	923.5	2,612.8	3,181.4	5,730.1	255.6
1968 ASM .....	(NA)	(NA)	167.2	1,170.2	135.2	263.1	868.0	2,452.9	2,910.4	5,322.2	198.4
1967 Census .....	4,437	1,275	163.1	1,082.5	131.2	254.8	798.2	2,060.5	2,552.2	4,612.2	234.2
1966 ASM .....	(NA)	(NA)	160.9	1,029.9	128.7	252.0	767.8	1,992.3	2,450.1	4,404.4	284.1
1965 ASM .....	(NA)	(NA)	153.6	944.9	123.7	242.2	712.2	1,817.3	2,344.9	4,134.6	230.5
1964 ASM .....	(NA)	(NA)	148.5	893.9	120.2	237.3	672.6	1,698.9	2,213.3	3,892.7	141.5
1963 Census .....	4,881	1,225	145.2	819.6	117.6	226.4	617.1	1,574.8	(NA)	(NA)	132.0
1962 ASM .....	(NA)	(NA)	143.3	787.5	116.5	224.8	590.3	1,469.5	(NA)	(NA)	108.6
1961 ASM .....	(NA)	(NA)	140.4	743.3	114.4	217.6	556.9	1,367.0	(NA)	(NA)	113.8
1960 ASM .....	(NA)	(NA)	143.2	741.2	117.7	223.2	560.9	1,349.0	(NA)	(NA)	119.8
1959 ASM .....	(NA)	(NA)	143.7	730.3	119.2	230.7	560.5	1,441.5	(NA)	(NA)	105.4
1958 Census .....	5,072	1,151	134.0	648.6	110.2	209.4	499.8	1,222.2	(NA)	(NA)	123.3

Note: "ASM" data are based on a representative sample of manufacturing establishments canvassed in the Annual Survey of Manufactures. These estimates may differ from the results of a complete canvass of all manufacturing establishments. The standard errors associated with these estimates are published in the annual survey of manufactures volumes for this period. For comparative purposes, the 1972 ASM estimate for the State of Oregon was 173 thousand employees, and \$3,271 million in value added with corresponding standard error of estimate of 2 and 2.

(NA) Not available.

<sup>1</sup>Includes employment and payroll at central administrative offices and auxiliary units. (For a definition of these units, see appendix.)

<sup>2</sup>The total cost of materials and value of shipments may include extensive duplication arising from shipments between establishments in the same industry classification. (For a more complete explanation, see appendix.)

TABLE 2. General Statistics for the State, Standard Metropolitan Statistical Areas, and Counties: 1972 and 1967

(See appendix, Explanation of Terms)

State, standard metropolitan statistical areas, and counties <sup>1</sup>	1972											1967	
	Establishments		All employees <sup>2</sup>		Production workers			Value added by manufacture	Cost of materials <sup>3</sup>	Value of shipments <sup>3</sup>	Capital expenditures, new <sup>4</sup>	All employees	Value added by manufacture
	Total	With 20 employees or more	Number	Payroll	Number	Man-hours	Wages						
	(number)	(number)	(1,000)	(million dollars)	(1,000)	(million)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(1,000)	(million dollars)
OREGON, TOTAL . . . . .	4 618	1 431	176.2	1 599.9	140.0	269.1	1 157.1	3 471.2	4 049.1	7 553.5	276.3	163.1	2 060.5
STANDARD METROPOLITAN STATISTICAL AREAS <sup>4</sup>													
EUGENE-SPRINGFIELD . . . . .	434	160	19.3	183.8	16.6	33.2	145.3	431.1	466.0	897.5	34.1	18.2	208.2
PORTLAND . . . . .	1 934	638	84.3	783.7	61.4	116.3	505.7	1 572.0	1 873.1	3 425.0	91.2	79.8	1 115.4
PORTION IN WASHINGTON . . . . .	191	54	11.2	111.2	9.0	17.7	84.8	243.9	339.6	589.7	12.3	10.5	186.5
PORTION IN OREGON . . . . .	1 773	584	73.1	672.5	52.4	98.6	420.9	1 328.1	1 533.5	2 835.3	78.9	69.3	928.9
SALEM . . . . .	211	95	12.0	91.8	10.0	18.2	69.9	198.0	224.5	472.2	20.2	9.5	121.3
COUNTIES													
BENTON . . . . .	105	33	2.7	23.5	2.2	4.5	18.5	44.4	74.7	118.6	2.1	2.6	28.4
CLACKAMAS . . . . .	300	98	11.1	102.8	8.6	16.0	69.0	223.0	230.8	452.5	20.2	7.9	109.9
CLATSOP . . . . .	75	16	2.3	20.9	1.9	3.7	15.5	36.5	69.0	105.2	4.0	2.9	36.1
COLUMBIA . . . . .	68	20	3.1	34.1	2.7	5.5	27.7	114.9	114.1	229.0	9.4	2.4	32.5
COOS . . . . .	140	34	5.1	49.3	4.4	8.8	42.0	112.9	147.6	264.0	7.9	6.8	79.8
CROOK . . . . .	35	12	1.8	14.9	1.7	3.2	13.3	26.8	39.4	65.9	2.4	1.6	15.3
CURRY . . . . .	68	15	1.6	14.1	1.5	2.9	12.7	24.2	38.5	62.6	4.7	1.9	22.2
DESCHUTES . . . . .	82	20	2.7	21.0	2.3	4.6	16.8	48.2	52.8	100.9	4.5	2.0	20.1
DOUGLAS . . . . .	238	84	10.6	97.2	9.1	17.3	79.0	204.9	238.9	446.1	37.2	8.6	103.5
HOOD RIVER . . . . .	28	9	1.0	8.9	.9	1.6	7.0	22.7	24.6	47.4	1.6	1.0	13.0
JACKSON . . . . .	216	59	6.9	63.1	5.9	11.9	51.8	151.5	168.2	319.3	7.3	6.1	77.6
JOSEPHINE . . . . .	115	27	2.3	20.7	1.9	3.7	15.7	45.2	55.4	99.3	3.4	2.5	30.0
KLAMATH . . . . .	82	37	4.5	44.5	3.9	7.8	35.6	84.4	88.0	173.0	9.2	3.7	36.1
LAKE . . . . .	20	7	.5	4.5	.4	.9	3.9	18.8	14.8	33.6	1.0	.5	5.5
LANE . . . . .	484	160	19.3	183.8	16.6	33.2	145.3	431.1	466.0	897.5	34.1	18.2	208.2
LINCOLN . . . . .	74	12	1.6	13.7	1.4	2.6	11.3	39.9	40.6	80.2	3.4	1.8	17.7
LINN . . . . .	198	70	8.8	84.7	7.3	14.5	66.9	215.6	254.5	478.1	12.5	8.0	111.9
MALHEUR . . . . .	30	5	1.3	8.0	1.1	2.0	6.0	29.2	27.7	58.5	1.2	2.0	22.7
MARION . . . . .	248	78	9.1	67.7	7.6	13.6	50.9	140.8	146.1	337.6	17.6	6.7	89.7
MULTNOMAH . . . . .	1 206	399	46.2	429.4	32.6	61.8	271.9	823.8	1 063.0	1 870.8	46.8	49.2	650.8
POLK . . . . .	63	17	2.9	24.1	2.4	4.6	19.0	57.2	78.4	134.6	2.6	2.8	31.6
TILLAMOOK . . . . .	57	11	1.8	16.6	1.4	2.8	12.0	29.3	47.1	75.6	3.1	1.8	19.8
UMATILLA . . . . .	70	26	2.9	21.6	2.4	4.9	16.6	44.3	63.3	106.6	2.3	2.9	35.8
UNION . . . . .	59	12	1.6	14.3	1.4	2.7	11.9	33.2	45.8	79.7	2.2	1.2	14.6
WASHINGTON . . . . .	267	87	15.8	140.3	11.2	20.8	80.0	281.3	239.7	512.0	11.9	12.2	168.2
YAMHILL . . . . .	111	32	3.2	26.3	2.5	4.9	19.0	69.8	101.2	169.6	6.6	2.2	25.9

<sup>1</sup>Some counties were withheld from publication in order to (a) avoid disclosing figures for individual companies or (b) permit further checking of the figures for smaller counties. Additional detail will appear in the final report for this State.

<sup>2</sup>Includes employment and payroll at central administrative offices and auxiliary units. (For a definition of these units, see appendix.)

<sup>3</sup>The total cost of materials and value of shipments may include extensive duplication arising from shipments between establishments in the same industry classification. (For a more complete explanation, see appendix.)

<sup>4</sup>The standard metropolitan statistical areas in this State are defined as follows:

EUGENE-SPRINGFIELD SMSA: Coextensive with Lane County, OR.

PORTLAND, OR-WA, SMSA: Consists of Clackamas, Multnomah, and Washington Counties, OR, and Clark County, WA.

SALEM SMSA: Consists of Marion and Polk Counties, OR.



TABLE 3. General Statistics for the State, by Industry Groups and Industries: 1972 and 1967

(See appendix, Explanation of Terms)

Code	Industry	1972											1967	
		Establishments		All employees		Production workers			Value added by manufacture	Cost of materials <sup>1</sup>	Value of shipments <sup>1</sup>	Capital expenditures, new	All employees	Value added by manufacture
		Total	With 20 employees or more	Number	Payroll	Number	Man-hours	Wages						
		(number)	(number)	(1,000)	(million dollars)	(1,000)	(million)	(million dollars)					(1,000)	(million dollars)
	ALL INDUSTRIES, TOTAL <sup>2</sup> . . . . .	4 613	1 431	176.2	1 599.9	140.0	269.1	1 157.1	3 471.2	4 049.1	7 553.5	276.3	163.1	2 060.5
20	FOOD AND KINDRED PRODUCTS. . . . .	406	185	22.2	168.3	16.8	30.7	110.6	399.8	739.1	1 188.4	23.3	20.9	299.5
201	MEAT PRODUCTS. . . . .	75	20	2.5	22.7	2.0	3.9	16.4	42.1	194.4	236.2	2.6	1.8	20.1
2011	MEATPACKING PLANTS. . . . .	47	11	1.0	10.7	.7	1.5	7.8	20.5	116.7	136.8	1.2	CC	(D)
2013	SAUSAGES AND OTHER PREPARED MEATS. . . . .	19	7	1.0	7.9	.8	1.4	5.5	13.4	51.6	65.4	1.2	(NA)	(NA)
2016	POULTRY DRESSING PLANTS. . . . .	9	4	.6	4.1	.5	1.0	3.1	8.2	26.1	34.0	.2	(NA)	(NA)
2026	FLUID MILK. . . . .	37	26	1.6	17.4	.6	1.3	6.6	33.7	109.5	142.6	1.4	1.9	32.7
203	PRESERVED FRUITS AND VEGETABLES. . . . .	77	46	9.3	55.1	8.4	14.9	45.8	118.3	133.5	302.8	7.7	(NA)	(NA)
2033	CANNED FRUITS AND VEGETABLES. . . . .	32	19	3.6	20.4	3.3	5.4	17.6	38.9	33.8	123.8	2.7	FF	(D)
2037	FROZEN FRUITS AND VEGETABLES. . . . .	19	18	4.8	28.8	4.3	8.1	24.0	61.2	74.4	135.8	4.4	(NA)	(NA)
204	GRAIN MILL PRODUCTS. . . . .	35	14	1.0	8.7	.6	1.3	5.4	28.4	90.1	117.1	1.0	1.1	25.6
205	BAKERY PRODUCTS. . . . .	40	20	2.6	26.5	1.6	3.1	14.7	70.5	41.3	111.7	1.2	2.6	46.7
208	BEVERAGES. . . . .	38	15	1.2	12.7	.6	1.0	5.4	39.2	36.9	75.7	3.0	1.2	28.5
209	MISC. FOODS AND KINDRED PRODUCTS. . . . .	64	28	2.6	15.2	2.1	3.3	9.8	32.9	74.3	107.5	4.1	(NA)	(NA)
2091	CANNED AND CURED SEAFOODS. . . . .	11	4	.7	3.9	.6	1.1	3.0	7.5	32.7	40.2	.3	.9	8.1
24	LUMBER AND WOOD PRODUCTS. . . . .	1 879	581	72.4	671.1	65.2	129.6	577.5	1 487.2	1 846.2	3 338.0	142.0	(NA)	(NA)
2411	LOGGING CAMPS; LOGGING CONTRACTORS. . . . .	1 122	169	13.1	103.9	11.9	21.3	91.2	217.9	289.2	509.8	30.4	11.6	141.4
242	SAWMILLS AND PLANING MILLS. . . . .	395	210	27.3	263.1	24.5	49.2	222.1	626.2	737.6	1 365.7	56.5	25.1	269.8
2421	SAWMILLS AND PLANING MILLS, GENERAL. . . . .	335	199	26.5	259.2	23.8	48.0	218.7	618.7	728.9	1 349.4	56.0	24.6	264.8
2429	SPECIAL PRODUCT SAWMILLS, NEC. . . . .	45	7	.4	2.2	.4	.6	1.9	4.9	5.7	10.5	.4	.4	4.8
243	MILLWORK, PLYWOOD, STRUC. MEMBERS. . . . .	251	153	26.5	256.6	24.2	49.7	226.9	538.0	704.0	1 242.9	33.3	(NA)	(NA)
2431	MILLWORK. . . . .	75	29	4.3	33.0	3.9	7.4	27.7	59.8	97.0	156.0	3.5	(NA)	(NA)
2436	SOFTWOOD VENEER AND PLYWOOD. . . . .	103	103	19.5	195.8	17.9	36.9	175.8	428.4	519.5	949.9	24.5	(NA)	(NA)
244	WOOD CONTAINERS. . . . .	13	6	.3	1.3	.3	.6	1.1	2.9	3.9	6.7	.1	(NA)	(NA)
245	WOOD BUILDINGS AND MOBILE HOMES. . . . .	15	11	1.4	12.1	1.3	2.5	9.1	21.8	44.0	66.1	.3	(NA)	(NA)
249	MISCELLANEOUS WOOD PRODUCTS. . . . .	83	32	3.6	34.2	3.1	6.4	27.1	80.3	67.3	146.9	21.5	(NA)	(NA)
2499	WOOD PRODUCTS, NEC. . . . .	72	24	3.1	29.1	2.6	5.5	23.2	69.1	55.2	124.3	21.1	(NA)	(NA)
25	FURNITURE AND FIXTURES. . . . .	96	28	2.7	20.9	2.2	4.2	15.1	37.9	29.0	66.7	1.1	2.9	26.1
251	HOUSEHOLD FURNITURE. . . . .	56	20	2.2	16.6	1.9	3.6	12.2	31.4	23.9	55.1	.9	(NA)	(NA)
2511	WOOD HOUSEHOLD FURNITURE. . . . .	32	10	1.5	11.5	1.3	2.6	8.7	21.4	13.6	34.8	(D)	(NA)	(NA)
2512	UPHOLSTERED HOUSEHOLD FURNITURE. . . . .	17	6	.5	4.0	.4	.8	2.9	6.7	5.3	12.0	(D)	(NA)	(NA)
26	PAPER AND ALLIED PRODUCTS. . . . .	50	37	8.5	93.7	6.9	13.8	71.2	301.2	289.3	589.8	33.1	8.2	154.8
2621	PAPERMILLS, EXCEPT BUILDING PAPER. . . . .	8	7	3.6	42.9	2.9	5.7	33.0	146.5	121.0	267.7	24.7	3.2	66.8
2631	PAPERBOARD MILLS. . . . .	7	7	1.9	23.5	1.7	3.5	18.5	96.3	83.6	179.8	6.0	1.8	45.0
2643	BAGS, EXCEPT TEXTILE BAGS. . . . .	5	4	.4	3.9	.3	.7	2.8	10.3	12.5	22.7	.4	AA	(D)
27	PRINTING AND PUBLISHING. . . . .	399	68	6.6	55.1	3.7	6.5	30.3	118.1	52.7	170.5	6.4	5.8	75.6
2711	NEWSPAPERS. . . . .	102	29	3.6	29.5	1.5	2.7	12.2	62.4	21.1	83.5	3.5	3.3	40.5
2712	COMMERCIAL PRINTING, LITHOGRAPHIC. . . . .	82	13	1.0	8.8	.7	1.2	5.9	16.6	14.5	31.0	.9	(NA)	(NA)
2761	MANIFOLD BUSINESS FORMS. . . . .	13	7	.6	4.7	.4	.8	3.5	16.3	8.5	24.5	1.3	.3	8.6
28	CHEMICALS AND ALLIED PRODUCTS. . . . .	67	32	1.9	19.3	1.3	2.6	11.0	69.1	89.7	158.2	6.3	2.0	50.8
289	MISCELLANEOUS CHEMICAL PRODUCTS. . . . .	28	9	.5	5.4	.3	.6	3.0	23.5	42.1	65.5	1.7	(NA)	(NA)
30	RUBBER AND MISC. PLASTICS PROD. . . . .	71	22	1.3	10.0	1.0	2.0	6.6	19.9	18.4	37.9	2.2	(NA)	(NA)
3019	MISCELLANEOUS PLASTICS PRODUCTS. . . . .	55	16	.9	7.0	.8	1.5	4.8	14.0	13.2	26.9	1.8	(NA)	(NA)
32	STONE, CLAY, AND GLASS PRODUCTS. . . . .	189	35	3.3	31.0	2.6	5.2	23.8	68.7	53.6	122.1	11.2	2.9	45.3
327	CONCRETE, GYPSUM, PLASTER PRODUCTS. . . . .	130	25	2.1	19.4	1.5	3.0	14.0	42.3	37.5	79.9	10.3	1.7	25.8
329	MISC. NONMETALLIC MINERAL PRODUCTS. . . . .	26	3	.3	2.3	.2	.5	1.8	5.2	2.8	8.1	.5	(NA)	(NA)
332	IRON AND STEEL FOUNDRIES. . . . .	15	11	2.5	24.9	1.9	3.9	17.5	43.3	18.4	56.2	1.9	EE	(D)
3321	GRAY IRON FOUNDRIES. . . . .	7	4	.3	2.1	.2	.4	1.7	3.4	1.5	4.9	(D)	CC	(D)
336	NONFERROUS FOUNDRIES. . . . .	21	8	.8	6.9	.7	1.2	4.9	12.6	8.9	21.1	.9	.7	7.5
3361	ALUMINUM FOUNDRIES. . . . .	11	5	.6	5.3	.5	.9	3.9	9.9	7.1	16.7	.7	.5	5.9
34	FABRICATED METAL PRODUCTS. . . . .	280	99	8.2	75.0	6.2	11.8	49.4	153.1	145.1	294.8	7.5	(NA)	(NA)
341	METAL CANS AND SHIPPING CONTAINERS. . . . .	8	4	.4	4.5	.3	.7	3.3	15.9	23.7	38.7	1.0	(NA)	(NA)
342	CUTLERY, HANDTOOLS AND HARDWARE. . . . .	32	15	2.3	19.8	1.7	3.3	12.0	43.0	22.9	63.1	2.6	.9	10.8
3425	HANDELSAWS AND SAWBLADES. . . . .	10	6	1.1	11.1	.7	1.4	6.0	23.6	6.3	28.9	2.0	.2	2.5
344	FABRICATED STRUCTURAL METAL PROD. . . . .	122	40	3.2	30.4	2.3	4.3	20.1	57.2	65.3	122.9	2.7	3.3	40.4
3441	FABRICATED STRUCTURAL METAL PRODUCTS. . . . .	27	10	.7	6.8	.5	.9	4.7	12.3	12.6	24.3	.6	CC	(D)
3442	METAL DOORS, SASH, AND TRIM. . . . .	21	6	.7	4.5	.6	1.0	3.0	8.4	12.7	21.3	.4	BB	(D)
3443	FABRICATED PLATEWORK (BOILERS SHOP). . . . .	20	10	.5	5.1	.4	.7	3.6	10.6	9.4	19.5	.2	CC	(D)
3444	SHEET METALWORK. . . . .	35	9	.8	8.7	.7	1.3	6.8	14.3	16.5	31.3	.4	.8	10.4
346	METAL FORGINGS AND STAMPINGS. . . . .	14	7	.3	3.0	.2	.5	2.2	5.2	4.2	9.2	.3	(NA)	(NA)
347	METAL SERVICES, NEC. . . . .	30	9	.5	3.6	.4	.8	2.7	5.3	2.1	7.5	.3	.4	3.5
349	MISC. FABRICATED METAL PRODUCTS. . . . .	57	17	1.2	10.4	.9	1.6	6.9	20.9	22.5	43.1	.6	(NA)	(NA)
35	MACHINERY, EXCEPT ELECTRICAL. . . . .	407	96	10.0	99.3	7.4	13.0	63.9	179.9	149.0	323.2	4.9	7.8	114.4
353	CONSTRUCTION AND RELATED MACHINERY. . . . .	55	19	3.7	36.7	2.4	4.3	22.0	65.1	64.4	126.5	1.3	3.1	49.9
3544	SPECIAL DIE, TOOLS, JIGS, FIXTURES. . . . .	24	5	.3	3.7	.3	.5	3.0	7.2	2.6	9.5	.1	(NA)	(NA)
356	GENERAL INDUSTRIAL MACHINERY. . . . .	34	12	1.9	19.5	1.5	2.8	14.6	30.0	29.1	60.0	.5	.3	4.1

See footnotes at end of table.

TABLE 3. General Statistics for the State, by Industry Groups and Industries: 1972 and 1967—Continued

(See appendix, Explanation of Terms)

Code	Industry	1972											1967	
		Establishments		All employees		Production workers			Value added by manufacture	Cost of materials <sup>1</sup>	Value of shipments <sup>1</sup>	Capital expenditures, new	All employees	Value added by manufacture
		Total	With 20 employees or more	Number	Payroll	Number	Man-hours	Wages						
		(number)	(number)	(1,000)	(million dollars)	(1,000)	(million)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(1,000)	(million dollars)
352	REFRIGERATION, SERVICE MACHINERY .	13	6	.4	3.8	.3	.6	2.2	8.3	6.9	14.8	.6	.4	5.5
36	ELECTRIC, ELECTRONIC EQUIPMENT .	97	36	3.5	29.4	2.6	5.0	18.0	54.2	52.9	104.4	1.8	(NA)	(NA)
361	ELECTRIC DISTRIBUTING EQUIPMENT. .	10	5	.3	3.2	.2	.5	1.9	8.1	14.0	21.8	.3	(NA)	(NA)
366	COMMUNICATION EQUIPMENT. . . . .	16	10	1.0	9.4	.8	1.5	5.3	13.3	13.3	25.7	.4	38	(D)
367	ELECTRONIC COMPONENTS AND ACCESS .	13	7	.8	5.8	.6	1.3	3.7	9.9	2.9	12.3	.3	EE	(D)
369	MISC. ELECTRICAL EQUIP., SUPPLIES.	27	5	.6	5.1	.4	.6	3.3	10.7	12.0	22.1	.5	.4	5.4
3691	STORAGE BATTERIES. . . . .	7	4	.4	3.5	.3	.6	2.4	7.6	10.9	18.0	.4	AA	(D)
371	MOTOR VEHICLES AND EQUIPMENT . . .	59	17	3.1	30.5	2.6	5.3	24.5	83.8	119.9	202.5	3.0	1.8	23.5
3714	MOTOR VEHICLE PARTS AND ACCESSORIES.	33	7	1.4	13.5	1.2	2.3	10.7	32.0	25.2	56.3	1.7	98	(D)
379	MISC. TRANSPORTATION EQUIPMENT . .	42	19	1.6	12.3	1.4	2.5	8.8	25.9	41.7	67.9	1.7	(NA)	(NA)
38	INSTRUMENTS AND RELATED PRODUCTS	55	16	9.0	83.9	6.1	11.3	44.5	181.3	95.6	271.2	5.3	(NA)	(NA)
39	MISC. MANUFACTURING INDUSTRIES .	135	27	2.2	14.3	1.7	2.8	8.8	27.4	18.5	44.9	1.8	1.8	17.7
394	TOYS AND SPORTING GOODS. . . . .	34	6	.8	4.1	.7	1.0	2.7	8.4	5.5	13.6	(D)	.6	5.1
399	MISCELLANEOUS MANUFACTURES . . . .	79	17	1.0	7.0	.7	1.3	4.4	13.4	8.3	21.1	.4	.8	8.1
3943	SIGNS AND ADVERTISING DISPLAYS . . .	40	8	.4	4.0	.3	.6	2.6	7.7	3.8	11.2	.2	.4	5.4
3999	MANUFACTURING INDUSTRIES, NEC. . . .	33	5	.4	1.8	.3	.4	.9	3.5	2.4	5.5	.1	.2	1.5
--	ADMINISTRATIVE AND AUXILIARY . . .	90	34	3.9	46.8	-	-	-	-	-	-	-	2.7	-

Note: The following symbols indicate employment size range for 1967:

AA less than 250 employees      EE 1,000 to 2,499 employees  
BB 250 to 499 employees      FF 2,500 employees and over  
CC 500 to 999 employees

- Represents zero. (NA) Not available. Because of a revision to this industry or industry group in the 1972 edition of the SIC manual, 1967 census data are not available on a comparable basis. (D) Withheld to avoid disclosing figures for individual companies.

<sup>1</sup>The total cost of materials and value of shipments for industry groups shown may include extensive duplication arising from shipments between establishments in the same industry classification. (For a more complete explanation, see appendix.)

<sup>2</sup>Includes figures for industry groups which have been withheld from publication in order to (a) avoid disclosing figures for individual companies or (b) permit further checking of figures for smaller industry groups. Additional detail will appear in the final report for this State.



## Appendix A. SCOPE AND COVERAGE

This report is one of a series presenting preliminary information, by State, from the 1972 Census of Manufactures. The data will be superseded in a final report which, in turn, will be included in *Volume III, Area Statistics, 1972 Census of Manufactures*. The final report will include a comprehensive discussion of the concepts and definitions used in the census.

The census of manufactures covers each manufacturing establishment in the United States with one paid employee or more; manufacturing establishments with no employees are excluded. Firms which operated more than one establishment were required to file a separate report for each location. Companies which engaged in distinctly different lines of activity at one location were asked to submit separate reports if the company records permitted such a separation and the activities were of significant size.

This report includes figures for administrative offices, warehouses, garages, or other auxiliary units which service manufacturing establishments.

In the 1972 census, the approximately 120,000 manufacturing establishments with fewer than 10 employees were excused from filing reports. Under special arrangements which safeguarded the confidentiality of both tax and census records, data on payrolls, sales, and industry classification from the administrative records of the Social Security Administration and the Internal Revenue Service were made available to the Census Bureau for use in the 1972 Economic Censuses (retail and wholesale trade, service industries, construction industries, manufactures, and mineral industries). Estimates for data other than payrolls and sales for these small establishments were constructed from industry averages. The effect on industry aggregates is slight in most industries. For manufacturing as a whole, these small establishments account for less than 3 percent of the payrolls and value added.

Establishments are classified by industry in accordance with industry definitions described in the 1972 edition of the Standard Industrial Classification (SIC) Manual. For 1972, the SIC was significantly revised and the comparability with prior year's data for some industries was significantly affected. The comparability at the 2- and 3-digit SIC levels was less affected. The final volumes of the 1972 Census of Manufactures will contain a table relating aggregates based on the 1972 SIC with aggregates derived from classifying establishments according to the 1967 SIC definitions.

As in earlier censuses, a number of small establishments may have been misclassified as to industry. However, such possible misclassifications have significant effect on *none* of the statistics except the number of establishments. As indicated above, report forms were not mailed to very small establishments (fewer than 10 employees). The industry classifications for these establishments were assigned on the basis of brief descriptions of the general activity of the establishment. Where the description is incomplete or there are relatively fine lines of demarcation among industries or between manufacturing and nonmanufacturing activity, the code assigned to an establishment could differ from that which would have been assigned on the basis of more complete product information. Therefore, the total establishment count for individual industries should be viewed as an approximation rather than a precise measurement. The counts for establishments with 20 employees or more are more reliable than the total number of establishments.

More detailed figures for this State will appear in the final census reports. Final reports will also include a comprehensive discussion of such concepts as "industry" and "establishment," as well as the various statistical items such as "employment," "value of shipments," and "value added." Similar preliminary and final reports will be issued for other States during the coming months. A series of preliminary summary reports showing U.S. totals for each manufacturing industry and for each State are being issued. Final industry reports and final area reports will be published during 1974.

Order forms describing the individual reports and listing their prices may be obtained from any U.S. Department of Commerce district office or from the Publications Distribution Section, Social and Economic Statistics Administration, Washington, D.C. 20233.

The 1972 Census of Manufactures is the 29th census of manufacturing establishments in the United States. For 1972, it was conducted jointly with the censuses of mineral industries, construction industries, retail trade, wholesale trade, and selected services under authority of Title 13 of the United States Code. Title 13 specifies that a census of manufactures be conducted every 5 years and, as amended, to cover years ending in "2" and "7". Title 13 also authorizes an annual sample survey of manufacturing establishments in interim years.



## Appendix B. EXPLANATION OF TERMS

*(For a more complete discussion of these terms and the method of compiling the Census of Manufactures, see the "Introduction" to the 1967 Census of Manufactures, Volume III).*

**All Employees**—All full-time and part-time employees on the payrolls of operating manufacturing establishments for any part of the pay period ending nearest the 12th of the months specified on the report form. Included are all persons on paid sick leave, paid holidays, and paid vacations during these pay periods. Officers of corporations are included as employees; proprietors and partners of unincorporated firms are excluded. The "all employee" number is the average number of production workers for the midmonth payroll period of March, May, August, and November plus the number of nonproduction employees in mid-March.

**Number of Production Workers**—Workers (up through the working foreman level) engaged in fabricating, processing, assembling, inspecting, receiving, packing, warehousing, shipping (but not delivering), and maintenance, repair, janitorial, and watchman services, product development, auxiliary production for plant's own use (e.g., powerplant), recordkeeping, and other closely associated services. Proprietors and partners are excluded.

**Payroll**—This item includes all forms of compensation such as salaries, wages, commissions, dismissal pay, bonuses, vacation and sick leave pay, and compensation in kind, prior to such deductions as employees' Social Security contributions, withholding taxes, group insurance, union dues, and savings bonds. The total includes salaries of officers of these establishments, if a corporation; it excludes payments to the proprietor or partners, if an unincorporated concern. Respondents were told that in reporting they could follow the definition of payrolls used for calculating the Federal withholding tax.

**Man-Hours of Production Workers**—This total relates to production-worker man-hours worked or paid for at the plant including actual overtime hours (not straight-time equivalent hours). It excludes hours paid for vacation, holidays, or sick leave when the employee was not at the plant.

**Cost of Materials**—The term "Cost of Materials" refers to charges actually paid or payable for items consumed or put into production during the year, including freight and other direct charges incurred by the establishment in acquiring these materials. It includes the cost of materials or fuel consumed regardless of

whether these items were purchased by the establishment from other companies, transferred to it from other establishments of the same company, or withdrawn from inventory during the year. The establishment was requested to value materials transferred from other parts of the company at its approximate market value, not at cost of production. The important components of this cost item are (a) all raw materials, semifinished goods, parts, components, containers, scrap, and supplies put into production or used as operating supplies and for repair and maintenance during the year; (b) electric energy purchased; (c) fuels consumed for heat, power, or the generation of electricity; (d) work done by others on materials or parts furnished by manufacturing establishments (contract work); and (e) products bought and resold in the same condition.

**Value of Shipments**—The value of shipments is the received or receivable net selling value, f.o.b. plant (exclusive of freight and taxes), of all products shipped, both primary and secondary, as well as all miscellaneous receipts such as receipts for contract work performed for others, installation and repair, sales of scrap, and sale of products bought and resold without further processing. Included are all items made by the establishment or for it under contract from materials owned by it whether sold, transferred to other plants of the same company, or shipped on consignment. The net selling value of products made in one plant on a contract basis from materials owned by another was reported by the plant providing the materials.

In the case of multiunit companies, the manufacturer was requested to report the value of products transferred to other establishments of the same company at full economic value; i.e., to include not only the direct costs of production but also a reasonable proportion of "all other costs" (including company overhead) and profit.

**Duplication in Cost of Materials and Value of Products**—The aggregate cost of materials and value-of-shipments figures for industry groups and for all manufacturing industries may include large amounts of duplication since the products of some industries are used as materials by others. With some important exceptions, such as motor vehicles and parts, this duplication is not significant within individual industries but arises from the addition of the totals of related industries in successive stages of the production of a finished manufactured product. Examples are the addition of flour mills to bakeries in the food group and the addition of pulp mills to paper mills in the paper and allied products group of industries. Esti-



mates of this duplication indicate that the value of manufactured products exclusive of such duplication—the value of finished manufactures—approximates two-thirds of the total value of products.

Prior to 1962, the Bureau of the Census did not publish figures for cost of materials or value of shipments if they contained significant duplication. Effective with the 1962 annual survey these figures were shown at all industry levels for the United States to meet the requests for their use in studies in which the presence of an indeterminate amount of duplication is not a limiting factor. However, they are appropriately footnoted. Effective with the 1964 annual survey, these industry group totals are also shown at the State, standard metropolitan statistical area, and large-county level.

Even where there is no significant amount of duplication, value-of-shipments figures are deficient as measures of the relative economic importance of individual manufacturing industries or geographic areas because of the wide variation in ratio of materials, labor, and other processing costs to value of shipments among industries.

**Value Added by Manufacture**—This measure of manufacturing activity is derived by subtracting the cost of materials, supplies, containers, fuel, purchased electricity, and cost of resales contract work from the value of shipments for products manufactured plus resales and receipts for services rendered. The result of this calculation is adjusted by the net change in finished goods and work-in-process inventories between the beginning and end of the year. (In the few industries that report value of production rather than value of shipments, only changes in work-in-process inventories are used to adjust value added. In the shipbuilding and repairing industry, no inventory adjustment is made.)

“Value added” avoids the duplication in the value of shipments figure which results from the use of products of some establishments as materials by others. Value added is considered to be the best value measure available for comparing the relative economic importance of manufacturing among industries and geographic areas.

**Expenditures for Plant and Equipment**—Manufacturing establishments in operation and establishments under construction but not yet in operation, were asked to report their expenditures for (a) permanent additions and major alterations to the manufacturing establishment, and (b) new machinery and equipment used for replacement purposes and additions to plant capacity if they are of the type for which depreciation accounts are ordinarily maintained.

These totals exclude expenditures for new facilities and equipment leased from nonmanufacturing concerns; new facilities owned by the Federal Government but operated under contract by private companies; and plant and equipment furnished to the manufacturer by communities and nonprofit organizations. Expenditures for used plant and equipment (although reported in the census), expenditures for land, and cost of maintenance and repairs charged as current operating expense are also omitted from the figures for new capital expenditures.

**Central Administrative Offices and Auxiliary Units**—In the 1972 census as in previous years, respondents were asked to file separate reports for central administrative offices or auxiliary units which were (1) at different locations from the establishments served or, (2) at the same location as one of these establishments but were not operated as an integral part thereof and served two or more establishments. The functions of employees in central administrative offices include general company policy determination, planning and management (that is, company purchasing, accounting, general engineering, direction of company personnel matters, and legal and patent matters). Auxiliaries are storage facilities, garages, repair shops, purchasing offices, sales promotion offices, and research laboratories serving the plants or central management of the company.

**Standard Metropolitan Statistical Areas**—Standard metropolitan statistical areas (SMSA) are integrated economic and social units with a large volume of daily travel and communication between the central city and outlying parts of the area.<sup>1</sup> Each area (except in New England) consists of one whole county or more. An area may contain not only highly industrialized counties but also adjoining counties which, though primarily residential in character, contribute significantly to the industrial counties' labor force and are socially and economically integrated with the central city. These areas are defined by the Federal Committee on Standard Metropolitan Statistical Areas of the Office of Management and Budget for general-purpose use throughout the Federal Government in presenting economic and social data. In the New England States, similar intergration criteria are applied in defining

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<sup>1</sup> Each standard metropolitan statistical area must include either (1) a city with 50,000 or more inhabitants, or (2) a city having a population of at least 25,000 which (a) with the addition of the population of contiguous places has a population density of at least 1,000 persons per square mile; (b) constitutes, for general economic and social purposes, a single community with a combined population of at least 50,000; and (c) includes a total population of at least 75,000 in the county or counties in which the city and contiguous places are located.

SMSA's on a city and town basis because towns rather than counties are regarded as the significant unit in this region of the country.

The requirement that each SMSA consist of county units (except in New England) sometimes results in the inclusion in an area of considerable amount of territory which would not ordinarily be considered "metropolitan," much less "industrial." It is recognized that metropolitan areas could be more accurately defined in terms of smaller area segments such as minor civil

divisions, but the usefulness of areas so defined would be limited by the fact that many types of economic and social data are available only on a county basis.

Each SMSA is designated by the name of the principal city of the area. In addition to the name of the principal city, the area title may include one or two additional city names.

The data for SMSA's which changed definition since the 1967 census have not been retabulated on the new basis for years prior to 1972.







# 1972 CENSUS OF MANUFACTURES

## AREA SERIES

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U. S. DEPARTMENT OF COMMERCE • Social and Economic Statistics Administration • BUREAU OF THE CENSUS

## Pennsylvania

Value added by manufacturing in 1972 in the State of Pennsylvania amounted to \$23,532 million, a 7-percent increase from 1971 and a 22-percent increase from 1967.

This report presents preliminary results from the 1972 Census of Manufactures for the State, its Standard Metropolitan Statistical Areas, and its counties.

Data are provided for industry groups within the State. Historical data, back to 1958, are included for the State as a whole,

and 1967 figures on employment and value added are provided for the smaller areas.

The figures in this report have been subjected to only preliminary review and must be regarded as approximations of the final census figures. No adjustments have been made in the value figures for changes in price level.

For an explanation of the terms used in the tables, see the appendix at the end of this report.

TABLE 1. General Statistics for the State: 1972 and Earlier Years

(See appendix, Explanation of Terms)

Year	Establishments		All employees <sup>1</sup>		Production workers			Value added by manufacture	Cost of materials <sup>2</sup>	Value of shipments <sup>2</sup>	Capital expenditures, new
	Total	With 20 employees or more	Number	Payroll	Number	Man-hours	Wages				
	(number)	(number)	(1,000)	(million dollars)	(1,000)	(millions)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(million dollars)
PENNSYLVANIA											
1972 Census .....	18,237	7,972	1,418.6	12,783.7	1,013.0	1,951.4	7,892.0	23,532.2	25,026.3	48,222.4	1,485.4
1971 ASM .....	(NA)	(NA)	1,426.4	11,824.6	1,013.9	1,941.5	7,191.4	21,964.0	22,739.8	44,703.6	1,487.9
1970 ASM .....	(NA)	(NA)	1,514.0	11,824.3	1,084.6	2,098.5	7,266.9	21,448.2	22,342.8	43,525.6	1,472.8
1969 ASM .....	(NA)	(NA)	1,573.0	11,771.1	1,138.2	2,232.3	7,319.2	22,136.5	22,189.9	44,006.8	1,547.3
1968 ASM .....	(NA)	(NA)	1,553.8	10,965.8	1,130.6	2,216.6	6,860.8	20,318.3	20,810.5	40,998.9	1,592.0
1967 Census .....	18,771	8,369	1,549.5	10,349.7	1,136.2	2,211.3	6,488.7	19,276.8	19,574.0	38,590.5	1,633.4
1966 ASM .....	(NA)	(NA)	1,552.4	10,050.8	1,153.1	2,288.0	6,443.0	18,752.3	19,849.9	38,163.7	1,423.5
1965 ASM .....	(NA)	(NA)	1,491.5	9,228.5	1,108.8	2,191.4	5,944.9	17,115.9	18,258.1	35,076.6	1,074.9
1964 ASM .....	(NA)	(NA)	1,433.7	8,599.9	1,057.6	2,089.5	5,495.5	15,406.2	16,834.8	31,994.9	829.9
1963 Census .....	19,459	7,981	1,392.9	8,008.6	1,028.0	2,002.1	5,110.7	14,043.6	(NA)	(NA)	777.7
1962 ASM .....	(NA)	(NA)	1,409.7	7,739.7	1,041.4	2,021.4	4,961.1	13,129.8	(NA)	(NA)	766.6
1961 ASM .....	(NA)	(NA)	1,385.3	7,328.4	1,019.7	1,951.2	4,660.4	12,379.9	(NA)	(NA)	742.5
1960 ASM .....	(NA)	(NA)	1,452.9	7,471.4	1,076.1	2,061.3	4,824.8	12,925.0	(NA)	(NA)	842.3
1959 ASM .....	(NA)	(NA)	1,421.2	7,206.9	1,059.8	2,051.1	4,684.5	12,643.7	(NA)	(NA)	684.8
1958 Census .....	19,337	7,735	1,402.0	6,776.1	1,034.2	1,960.6	4,353.7	11,422.6	(NA)	(NA)	816.3

Note: "ASM" data are based on a representative sample of manufacturing establishments canvassed in the Annual Survey of Manufactures. These estimates may differ from the results of a complete canvass of all manufacturing establishments. The standard errors associated with these estimates are published in the annual survey of manufactures volumes for this period. For comparative purposes, the 1972 ASM estimate for the State of Pennsylvania was 1,405 thousand employees, and \$23,645 million in value added with corresponding standard error of estimate of 1 and 1.

(NA) Not available.

<sup>1</sup>Includes employment and payroll at central administrative offices and auxiliary units. (For a definition of these units, see appendix.)

<sup>2</sup>The total cost of materials and value of shipments may include extensive duplication arising from shipments between establishments in the same industry classification. (For a more complete explanation, see appendix.)

TABLE 2. General Statistics for the State, Standard Metropolitan Statistical Areas, and Counties: 1972 and 1967

(See appendix, Explanation of Terms)

State, standard metropolitan statistical areas, and counties <sup>1</sup>	1972										1967		
	Establishments		All employees <sup>2</sup>		Production workers			Value added by manufac- ture	Cost of materials <sup>3</sup>	Value of shipments <sup>3</sup>	Capital expendi- tures, new <sup>4</sup>	All employees	Value added by manufac- ture
	Total	With 20 employees or more	Number	Payroll	Number	Man-hours	Wages						
	(number)	(number)	(1,000)	(million dollars)	(1,000)	(million)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(1,000)	(million dollars)
PENNSYLVANIA, TOTAL. . . . .	18 237	7 972	1 418.6	12 783.7	1 013.0	1 951.4	7 892.0	23 532.2	25 026.3	48 222.4	1 485.4	1 549.5	19 276.8
STANDARD METROPOLITAN STATISTICAL AREAS <sup>4</sup>													
ALLENTOWN-BETHLEHEM-EASTON . . . . .	1 079	614	109.6	968.8	80.4	148.6	590.1	1 779.1	1 754.9	3 515.2	161.3	110.1	1 147.9
PORTION IN NEW JERSEY . . . . .	136	68	14.2	141.3	9.9	20.0	85.6	336.8	380.6	730.5	49.0	13.1	168.0
PORTION IN PENNSYLVANIA . . . . .	943	546	95.4	827.5	70.5	128.6	504.5	1 442.3	1 374.3	2 784.7	112.3	97.0	979.9
ALTOONA. . . . .	150	69	15.4	105.5	12.2	22.9	77.7	239.7	200.1	436.8	11.9	14.6	173.5
BINGHAMTON . . . . .	350	149	36.3	376.2	21.2	42.0	175.2	679.3	842.0	1 581.8	32.6	46.1	534.7
PORTION IN NEW YORK . . . . .	299	126	34.2	363.8	19.4	38.6	165.2	658.1	829.3	1 549.8	31.7	43.4	512.2
PORTION IN PENNSYLVANIA . . . . .	51	23	2.1	12.4	1.8	3.4	10.0	21.2	12.7	32.0	.9	2.7	22.4
ERIE . . . . .	482	211	42.2	408.3	28.9	57.5	255.0	757.6	647.0	1 392.9	48.3	42.3	575.1
HARRISBURG . . . . .	470	208	39.9	324.5	28.6	56.0	205.3	703.4	782.7	1 474.4	78.2	37.9	487.3
JOHNSTOWN. . . . .	271	93	23.1	204.4	18.9	33.6	153.5	337.7	350.1	682.0	16.5	25.1	266.1
LANCASTER. . . . .	709	328	53.0	446.3	38.8	77.1	280.6	944.2	1 015.4	1 936.0	85.4	54.1	721.6
NORTHEAST PENNSYLVANIA . . . . .	1 291	721	82.1	539.1	67.6	123.3	396.8	1 034.0	861.5	1 894.2	66.1	88.6	811.8
PHILADELPHIA . . . . .	7 735	3 044	501.3	4 816.1	332.7	647.3	2 730.6	9 242.7	9 848.9	19 046.5	562.7	573.8	7 958.7
PORTION IN NEW JERSEY . . . . .	1 361	525	70.1	683.8	46.3	90.7	389.7	1 245.8	1 442.7	2 694.3	112.0	75.5	1 052.2
PORTION IN PENNSYLVANIA . . . . .	6 374	2 519	431.2	4 132.3	286.4	556.6	2 340.9	7 996.9	8 406.2	16 352.2	450.7	498.4	6 906.5
PITTSBURGH . . . . .	2 503	964	259.8	2 803.5	165.1	320.6	1 566.6	4 119.0	5 380.7	9 372.7	258.9	299.6	3 838.1
READING. . . . .	625	312	53.2	441.0	40.5	78.0	296.1	1 890.0	1 837.7	1 714.2	49.7	56.4	597.5
WILLIAMSPORT . . . . .	216	102	18.6	139.5	14.6	28.6	96.1	314.6	275.9	583.8	11.1	20.2	244.0
YORK . . . . .	698	358	56.3	460.9	44.1	89.1	316.2	859.8	836.9	1 715.8	46.1	57.0	662.5
COUNTIES													
ADAMS. . . . .	116	64	6.5	42.5	5.4	11.0	30.8	82.8	89.2	169.3	6.5	6.4	67.9
ALLEGHENY. . . . .	1 661	616	167.3	1 869.2	95.0	183.0	900.6	2 398.4	3 449.6	5 759.5	136.5	195.4	2 356.9
ARMSTRONG. . . . .	68	29	4.1	35.2	3.2	6.4	24.8	86.5	61.1	144.8	6.6	6.0	88.0
BEAVER . . . . .	178	79	36.5	393.0	28.8	55.6	294.2	724.4	887.3	1 591.5	74.2	42.4	619.5
BEOFFORD. . . . .	50	19	2.5	17.7	2.0	3.7	12.8	39.0	40.0	76.7	1.5	2.1	19.5
BERKS. . . . .	625	312	53.2	441.0	40.5	78.0	296.1	890.0	837.7	1 714.2	49.7	56.4	597.5
BLAIR. . . . .	150	69	15.4	105.5	12.2	22.9	77.7	239.7	200.1	436.8	11.9	14.6	173.5
BRADFORD. . . . .	75	33	5.4	46.2	4.0	8.3	30.8	109.2	78.8	184.6	14.8	6.1	87.0
BUCKS. . . . .	843	328	45.5	432.4	33.1	65.2	276.7	797.0	969.6	1 741.1	70.5	43.6	616.1
BUTLER. . . . .	188	70	13.2	130.8	10.0	18.9	92.5	242.2	289.8	520.1	18.1	14.2	203.3
CAMBRIA. . . . .	159	57	19.1	180.6	15.4	26.9	134.7	295.1	305.7	594.8	15.2	21.5	239.0
CAMERON. . . . .	19	9	1.5	12.3	1.2	2.4	7.9	23.1	18.5	41.7	1.1	(D)	(D)
CARBON . . . . .	103	65	6.9	39.6	6.2	11.1	31.1	88.3	74.8	161.6	1.7	7.5	54.7
CENTRE. . . . .	102	39	6.7	53.7	5.0	10.8	35.1	129.1	88.2	217.3	8.0	7.4	75.1
CHESTER. . . . .	411	176	33.0	310.5	22.3	44.0	180.1	663.9	728.4	1 395.5	33.4	31.7	475.2
CLARION. . . . .	52	18	2.7	23.8	2.3	4.7	18.3	50.4	37.1	86.9	2.0	2.7	36.9
CLEARFIELD . . . . .	104	44	5.3	37.2	4.3	8.5	27.4	77.8	101.1	179.7	3.7	5.6	60.9
CLINTON. . . . .	56	23	6.2	48.6	5.0	9.8	35.8	75.4	80.0	147.5	3.6	6.4	65.7
COLUMBIA . . . . .	119	68	11.6	76.8	9.8	18.9	56.7	149.3	154.4	296.3	9.8	11.9	105.9
CRAWFORD . . . . .	162	58	10.8	91.2	8.2	16.0	63.8	186.2	156.2	339.1	13.8	10.3	132.3
CUMBERLAND . . . . .	176	78	14.9	110.0	11.0	22.5	73.9	255.4	273.4	524.1	43.8	12.0	160.2
DAUPHIN. . . . .	258	116	24.3	210.5	17.0	32.4	128.6	441.6	504.6	939.2	34.0	25.0	321.6
DELAWARE . . . . .	526	182	43.4	473.9	26.7	52.4	239.0	1 022.7	1 136.8	2 158.4	56.3	59.6	1 018.0
ELK. . . . .	82	35	9.2	75.2	6.8	13.5	49.7	146.0	100.2	243.4	9.9	9.4	98.6
ERIE . . . . .	482	211	42.2	408.3	28.9	57.5	255.0	757.6	647.0	1 392.9	48.3	42.3	575.1
FAYETTE. . . . .	143	52	8.0	57.4	6.5	12.2	42.8	119.4	107.4	223.9	6.1	7.9	82.5
FOREST . . . . .	7	3	.6	4.2	.5	1.0	3.7	11.1	6.2	18.0	.4	.5	6.2
FRANKLIN . . . . .	143	59	12.8	98.2	9.7	19.6	67.9	198.6	175.5	366.7	9.7	13.8	148.6
FULTON. . . . .	16	8	.6	3.7	.5	.8	3.1	6.0	2.5	8.5	.3	.6	3.3
GREENE . . . . .	24	8	.8	4.1	.7	1.3	3.4	6.0	9.6	15.4	.3	.6	4.4
HUNTINGDON . . . . .	58	15	3.7	23.6	3.2	5.7	18.8	49.1	32.2	80.9	3.4	4.1	34.7
INDIANA. . . . .	77	24	5.3	39.4	3.9	7.6	26.3	87.3	74.0	163.5	3.9	5.3	61.0
JEFFERSON. . . . .	86	37	5.6	38.6	4.3	8.2	26.0	62.7	36.5	98.6	4.1	5.1	40.2
JUNIATA. . . . .	55	13	1.7	9.3	1.6	3.0	7.5	16.8	21.6	38.0	1.0	1.4	9.2
LACKAWANNA . . . . .	479	272	31.2	209.4	25.7	47.1	153.2	369.3	348.4	715.5	30.7	33.7	293.6
LANCASTER. . . . .	709	328	53.0	446.3	38.8	77.1	280.6	944.2	1 015.4	1 936.0	85.4	54.1	721.6
LAWRENCE . . . . .	151	68	10.6	93.4	8.2	15.9	66.9	166.8	155.2	331.4	9.3	12.2	156.3
LEBANON. . . . .	187	102	14.1	104.0	11.8	22.1	77.5	248.2	247.2	495.5	15.0	15.4	204.5
LEHIGH . . . . .	437	236	41.9	357.0	29.9	54.6	211.9	647.3	820.2	1 453.3	63.5	43.2	411.3
LUZERNE. . . . .	712	396	45.7	290.4	37.9	68.5	215.7	591.3	461.0	1 054.1	28.2	49.7	462.7
LYCOMING . . . . .	216	102	18.6	139.5	14.6	28.6	96.1	314.6	275.9	583.8	11.1	20.2	244.0
MC KEAN. . . . .	113	39	7.3	58.8	5.6	11.0	40.4	111.4	125.2	236.3	9.1	8.2	121.8
MERCER . . . . .	149	53	18.7	195.8	14.6	30.4	145.8	374.4	441.5	811.7	15.2	21.7	328.0
MIFFLIN. . . . .	49	22	7.1	61.8	5.8	11.5	48.0	86.2	141.0	231.4	14.2	7.5	85.5
MONROE . . . . .	100	53	5.2	39.3	4.0	7.7	27.9	73.4	52.1	124.6	7.2	5.2	55.4
MONTGOMERY . . . . .	1 307	532	95.0	941.3	59.7	117.2	508.8	1 996.4	1 489.0	3 456.9	95.6	99.6	1 527.3
MONTGOMERY . . . . .	18	11	2.7	24.2	2.0	3.9	16.7	51.7	47.5	99.4	7.3	3.6	52.1
NORTHAMPTON. . . . .	403	245	46.6	430.9	34.4	62.9	261.5	706.7	479.3	1 169.8	47.1	46.3	513.9
NORTHUMBERLAND . . . . .	171	90	14.2	96.2	11.7	21.8	70.9	176.0	230.6	404.9	6.7	15.7	171.3
PERRY. . . . .	36	14	.7	4.0	.6	1.1	2.8	6.4	4.7	11.1	.4	.9	5.5
PHILADELPHIA . . . . .	3 287	1 301	214.3	1 974.2	144.6	277.8	1 136.3	3 516.9	4 082.4	7 600.3	194.9	263.9	3 269.9
POTTER . . . . .	36	9	4.1	41.1	.7	1.4	3.4	8.3	8.3	16.6	.4	1.0	5.6
SCHUYLKILL . . . . .	311	197	23.7	136.4	19.9	34.9	103.0	249.4	259.8	500.1	13.8	21.7	177.8
SNYDER. . . . .	63	31	3.1	19.3	2.6	5.1	15.5	37					

See footnotes at end of table.



TABLE 2. General Statistics for the State, Standard Metropolitan Statistical Areas, and Counties: 1972 and 1967—Continued

(See appendix, Explanation of Terms)

State, standard metropolitan statistical areas, and counties <sup>1</sup>	1972										1967		
	Establishments		All employees <sup>2</sup>		Production workers			Value added by manufac- ture	Cost of materials <sup>3</sup>	Value of shipments <sup>3</sup>	Capital expendi- tures, new	All employees	Value added by manufac- ture
	Total	With 20 employees or more	Number	Payroll	Number	Man-hours	Wages						
	(number)	(number)	(1,000)	(million dollars)	(1,000)	(million)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(1,000)	(million dollars)
COUNTIES-CONTINUED													
WARREN . . . . .	100	40	6.0	53.4	4.2	8.2	34.0	119.3	147.1	259.2	9.4	6.4	82.7
WASHINGTON . . . . .	213	100	18.3	176.4	14.6	29.3	132.2	341.9	422.8	758.7	21.0	18.2	295.2
WAYNE . . . . .	76	20	2.5	15.2	2.1	3.8	11.0	42.5	40.7	80.9	1.3	2.4	25.6
WESTMORELAND . . . . .	451	169	37.7	364.9	26.7	52.7	239.6	654.3	621.0	1 263.0	27.2	43.5	566.6
YORK . . . . .	582	294	49.8	418.4	38.7	78.1	285.4	777.0	747.7	1 546.5	39.6	50.6	594.5

(D) Withheld to avoid disclosing figures for individual companies.

<sup>1</sup>Some counties were withheld from publication in order to (a) avoid disclosing figures for individual companies or (b) permit further checking of the figures for smaller counties. Additional detail will appear in the final report for this State.<sup>2</sup>Includes employment and payroll at central administrative offices and auxiliary units. (For a definition of these units, see appendix.)<sup>3</sup>The total cost of materials and value of shipments may include extensive duplication arising from shipments between establishments in the same industry classification. (For a more complete explanation, see appendix.)<sup>4</sup>The standard metropolitan statistical areas in this State are defined as follows:

ALLENTOWN-BETHLEHEM-EASTON, PA-NJ, SMSA: Consists of Carbon, Lehigh, and Northampton Counties, PA, and Warren County, NJ.

ALTOONA SMSA: Coextensive with Blair County, PA.

BINGHAMTON, NY-PA, SMSA: Consists of Broome and Tioga Counties, NY, and Susquehanna County, PA.

ERIE SMSA: Coextensive with Erie County, PA.

HARRISBURG SMSA: Consists of Cumberland, Dauphin, and Perry Counties, PA.

JOHNSTOWN SMSA: Consists of Cambria and Somerset Counties, PA.

LANCASTER SMSA: Coextensive with Lancaster County, PA.

NORTHEAST PENNSYLVANIA SMSA: Consists of Lackawanna, Luzerne, and Monroe Counties, PA.

PHILADELPHIA, PA-NJ, SMSA: Consists of Bucks, Chester, Delaware, Montgomery, and Philadelphia Counties, PA, and Burlington, Camden, and Gloucester Counties, NJ.

PITTSBURGH SMSA: Consists of Allegheny, Beaver, Washington, and Westmoreland Counties, PA.

READING SMSA: Coextensive with Berks County, PA.

WILLIAMSPORT SMSA: Coextensive with Lycoming County, PA.

YORK SMSA: Consists of Adams and York Counties, PA.

TABLE 3. General Statistics for the State, by Industry Groups and Industries: 1972 and 1967

(See appendix, Explanation of Terms)

Code	Industry	1972											1967	
		Establishments		All employees		Production workers			Value added by manufacture	Cost of materials <sup>1</sup>	Value of shipments <sup>1</sup>	Capital expenditures, new	All employees	Value added by manufacture
		Total	With 20 employees or more	Number	Payroll	Number	Man-hours	Wages						
		(number)	(number)	(1,000)	(million dollars)	(1,000)	(million)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(1,000)	(million dollars)
	ALL INDUSTRIES, TOTAL <sup>2</sup> . . . .	18 237	7 972	1 418.6	12 783.7	1 013.0	1 951.4	7 892.0	23 532.2	25 026.3	48 222.4	1 485.4	1 549.5	19 276.8
20	FOOD AND KINDRED PRODUCTS. . . .	1 741	738	98.4	808.2	68.1	132.7	499.6	2 063.1	3 749.9	5 797.2	162.8	108.5	1 638.3
201	MEAT PRODUCTS. . . . .	270	117	13.9	117.8	10.9	22.2	82.9	229.5	1 050.0	1 277.0	18.9	14.6	172.3
2011	MEATPACKING PLANTS . . . . .	152	51	4.9	46.6	3.9	8.5	33.6	82.7	561.5	643.5	6.8	7.2	95.4
2013	SAUSAGES AND OTHER PREPARED MEATS. .	86	45	4.9	45.2	3.5	6.7	29.3	95.0	335.5	429.5	7.7	4.3	52.0
202	DAIRY PRODUCTS . . . . .	328	148	14.3	125.6	6.2	12.1	48.9	284.0	636.7	916.6	26.0	18.8	246.9
2023	CONDENSED AND EVAPORATED MILK . . . .	15	11	.5	3.6	.4	.7	2.5	7.9	55.2	62.6	(D)	.5	9.5
2024	ICE CREAM AND FROZEN DESSERTS. . . .	52	20	2.0	18.5	1.1	2.2	9.5	56.1	70.1	126.1	2.0	2.3	37.6
2026	FLUID MILK . . . . .	232	109	10.6	93.9	3.7	7.1	30.0	192.2	395.3	587.3	9.7	14.9	186.2
203	PRESERVED FRUITS AND VEGETABLES. .	113	66	13.6	93.9	11.5	19.8	73.2	299.4	413.2	709.1	27.5	(NA)	(NA)
2038	FROZEN SPECIALTIES . . . . .	25	15	3.5	26.6	2.8	4.5	19.7	69.0	85.1	154.1	10.7	(NA)	(NA)
204	GRAIN MILL PRODUCTS. . . . .	152	42	4.1	37.7	2.9	6.3	23.7	141.3	301.8	437.6	21.3	3.6	89.3
205	BAKERY PRODUCTS. . . . .	336	134	19.2	162.6	13.0	25.3	102.0	378.5	261.4	644.2	13.6	24.4	335.3
2051	BREAD, CAKE, AND RELATED PRODUCTS. .	290	111	14.2	118.6	8.6	16.5	66.7	241.1	173.9	420.1	8.4	19.9	243.6
2052	COOKIES AND CRACKERS . . . . .	46	23	5.1	44.0	4.3	8.8	35.4	137.3	87.6	224.1	5.3	4.5	91.7
206	SUGAR AND CONFECTIONERY PRODUCTS .	139	56	15.1	114.4	12.5	25.1	86.6	326.3	510.7	834.4	30.9	(NA)	(NA)
2065	CONFECTIONERY PRODUCTS . . . . .	120	44	6.1	37.2	5.2	10.3	29.3	98.8	117.5	218.0	9.0	8.0	99.9
2066	CHOCOLATE AND COCOA PRODUCTS . . . .	12	7	5.9	49.1	4.9	9.3	37.0	140.6	220.5	357.5	18.0	4.5	85.5
207	FATS AND OILS. . . . .	37	14	.8	7.7	.5	1.3	4.7	22.6	31.2	53.7	1.6	(NA)	(NA)
208	BEVERAGES. . . . .	216	107	10.4	98.2	5.7	11.4	48.8	244.0	339.2	580.9	18.1	13.0	212.9
2082	MALT BEVERAGES . . . . .	20	17	3.7	38.2	2.6	5.2	25.6	88.4	75.3	163.7	2.0	4.5	79.8
2086	BOTTLED AND CANNED SOFT DRINKS . . . .	165	76	5.7	51.0	2.5	4.9	18.7	104.5	172.3	275.5	7.1	6.4	87.9
2087	FLAVORING EXTRACTS AND SIRUPS, NEC .	23	8	.3	2.7	.2	.4	.9	7.1	9.4	16.9	.3	.4	7.6
209	MISC. FOODS AND KINDRED PRODUCTS .	150	54	6.9	50.2	4.9	9.3	28.8	137.6	205.6	343.7	4.9	(NA)	(NA)
2099	FOOD PREPARATIONS, NEC . . . . .	106	39	4.9	35.4	3.5	6.4	20.3	100.0	111.2	211.0	3.3	4.3	57.3
21	TOBACCO PRODUCTS . . . . .	48	31	7.0	37.1	6.3	11.9	30.4	116.1	94.3	210.2	2.2	9.5	116.9
2121	CIGARS . . . . .	29	18	6.0	31.2	5.4	10.2	25.9	104.7	66.1	170.7	1.6	8.6	100.0
22	TEXTILE MILL PRODUCTS. . . . .	636	419	60.4	381.4	52.0	100.9	290.4	723.8	929.4	1 658.6	53.0	65.3	572.4
2221	WEAVING MILLS, SYNTHETICS. . . . .	48	36	5.8	38.1	5.2	10.7	31.4	69.3	84.5	154.8	8.7	7.1	55.1
2231	WEAVING AND FINISHING MILLS, WOOL. .	29	13	1.3	8.7	1.1	2.0	6.8	14.4	10.9	23.4	.4	2.1	20.7
2241	NARROW FABRIC MILLS. . . . .	43	28	4.1	22.9	3.7	7.5	18.2	24.6	24.9	51.5	(D)	4.3	24.7
225	KNITTING MILLS . . . . .	288	201	31.1	189.1	26.8	50.4	141.5	396.2	499.0	899.0	23.0	33.0	277.0
2253	KNIT OUTERWEAR MILLS . . . . .	97	72	13.3	77.2	11.6	21.5	55.6	168.2	138.8	306.3	5.4	13.7	113.7
2258	WARP KNIT FABRIC MILLS . . . . .	25	24	3.8	30.3	3.2	6.8	23.5	71.1	137.5	208.2	4.9	(NA)	(NA)
2259	KNITTING MILLS, NEC. . . . .	8	4	.3	1.7	.3	.5	1.2	2.7	3.5	6.1	.1	.3	2.1
226	TEXTILE FINISHING, EXCEPT WOOL . .	46	28	2.8	19.7	2.4	4.9	15.8	42.0	40.3	84.2	6.5	2.2	22.3
2261	FINISHING PLANTS, COTTON . . . . .	12	4	.3	2.1	.3	.5	1.7	9.2	8.5	17.1	.1	.7	6.8
2262	FINISHING PLANTS, SYNTHETICS . . . . .	13	10	1.0	7.1	.8	1.7	5.5	9.4	8.8	20.8	1.2	.7	7.6
2269	FINISHING PLANTS, NEC. . . . .	21	14	1.5	10.5	1.3	2.7	8.6	23.4	23.0	46.4	5.2	.9	7.9
227	FLOOR COVERING MILLS . . . . .	28	16	4.8	37.4	3.8	7.9	28.2	60.9	118.2	179.7	(D)	4.7	60.3
2272	TUFTED CARPETS AND RUGS. . . . .	9	7	2.6	20.2	2.2	4.3	15.6	26.8	62.6	90.8	(D)	4.0	55.0
2281	YARN MILLS, EXCEPT WOOL. . . . .	12	8	1.1	6.0	1.0	2.1	5.1	9.9	16.5	26.5	.9	1.6	11.4
2282	THROWING AND WINDING MILLS . . . . .	36	32	4.0	21.6	3.5	6.5	16.9	29.8	35.2	65.7	(D)	4.1	28.8
2284	THREAD MILLS . . . . .	5	5	.4	2.2	.3	.6	1.4	5.5	6.6	11.9	1.3	.4	3.3
229	MISCELLANEOUS TEXTILE GOODS. . . .	77	35	3.7	26.9	3.0	6.1	18.4	53.7	72.1	123.6	2.9	3.2	44.3
2295	COATED FABRICS, NOT RUBBERIZED . . . .	10	6	.8	6.8	.6	1.2	4.5	17.1	23.2	39.8	1.0	8.8	(D)
23	APPAREL, OTHER TEXTILE PRODUCTS. .	2 091	1 506	154.9	799.2	140.5	241.9	653.6	1 281.8	892.1	2 169.8	31.0	173.9	1 057.7
2311	MEN'S AND BOYS' SUITS AND COATS. . .	149	118	28.1	183.3	24.7	44.2	145.4	295.7	191.5	480.3	4.4	32.0	224.8
232	MEN'S AND BOYS' FURNISHINGS. . . .	268	206	28.8	145.8	26.4	46.1	121.1	247.3	189.5	430.0	9.9	32.1	185.7
2321	MEN'S AND BOYS' SHIRTS AND NIGHTWEAR	76	65	12.2	62.6	11.2	20.4	52.5	113.5	90.4	198.7	2.3	14.5	89.1
2322	MEN'S AND BOYS' UNDERWEAR. . . . .	12	9	1.1	4.3	1.0	1.4	3.1	7.0	7.6	14.9	(D)	EE	(D)
2323	MEN'S AND BOYS' NECKWEAR . . . . .	19	7	.6	2.7	.6	1.0	2.0	6.1	3.0	9.1	(Z)	.6	3.8
2327	MEN'S AND BOYS' SEPARATE TROUSERS. .	71	52	7.0	37.6	6.4	10.8	31.2	58.6	43.6	100.4	2.1	6.1	43.3
2328	MEN'S AND BOYS' WORK CLOTHING. . . .	32	28	3.2	15.3	2.9	5.4	13.1	27.2	20.6	47.0	(D)	EE	(D)
2329	MEN'S AND BOYS' CLOTHING, NEC. . . .	58	45	4.7	23.3	4.3	7.1	19.2	34.9	24.3	59.9	1.4	5.4	31.8
233	WOMEN'S AND MISSES' OUTERWEAR. . .	1 005	813	63.4	296.0	58.6	97.0	251.7	458.2	256.2	711.6	10.0	63.3	347.0
2331	WOMEN'S, MISSES' BLOUSES, WAISTS . .	215	196	16.7	80.6	15.5	26.5	67.6	114.8	77.5	191.6	3.0	15.3	80.6
2335	WOMEN'S AND MISSES' DRESSES. . . . .	624	480	34.5	159.2	32.1	52.1	136.8	252.8	123.6	377.3	5.8	35.4	186.3
2337	WOMEN'S AND MISSES' SUITS AND COATS. .	55	45	3.6	17.1	3.4	5.7	14.9	24.4	13.7	37.3	.3	6.2	47.7
2339	WOMEN'S, MISSES' OUTERWEAR, NEC. . .	111	92	8.6	39.1	7.7	12.8	32.4	66.2	41.4	105.4	1.0	6.4	32.4
234	WOMEN'S, CHILDREN'S UNDERGARMENTS. .	115	95	12.3	58.3	11.0	19.8	46.1	94.5	94.4	187.4	1.9	14.9	87.0
2341	WOMEN'S AND CHILDREN'S UNDERWEAR . .	91	77	10.4	49.9	9.3	16.8	38.9	83.7	86.1	168.0	1.9	10.5	63.1
2342	BRASSIERES AND ALLIED GARMENTS . . .	24	18	1.9	8.5	1.7	3.0	7.1	10.8	8.3	19.4	.1	4.4	23.8
235	HATS, CAPS, AND MILLINERY. . . . .	25	10	1.1	5.9	1.0	1.7	4.4	9.7	7.5	17.4	.2	2.6	18.1
2352	HATS AND CAPS, EXCEPT MILLINERY. . .	21	8	1.0	5.4	.9	1.6	4.1	8.7	6.6	15.5	.2	2.5	16.5
236	CHILDREN'S OUTERWEAR . . . . .	126	96	8.3	42.1	7.4	12.8	34.6	66.7	42.9	110.9	1.2	13.9	86.0
2361	CHILDREN'S DRESSES AND BLOUSES . . .	80	60	5.8	29.3	5.1	8.6	23.9	46.6	33.5	81.6	.9	10.0	59.9

See footnotes at end of table.



TABLE 3. General Statistics for the State, by Industry Groups and Industries: 1972 and 1967—Continued  
(See appendix, Explanation of Terms)

Code	Industry	1972											1967	
		Establishments		All employees		Production workers			Value added by manufacture	Cost of materials <sup>1</sup>	Value of shipments <sup>1</sup>	Capital expenditures, new	All employees	Value added by manufacture
		Total	With 20 employees or more	Number	Payroll	Number	Man-hours	Wages						
		(number)	(number)	(1,000)	(million dollars)	(1,000)	(million)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(1,000)	(million dollars)
2369	CHILDREN'S OUTERWEAR, NEC. . . . .	32	26	1.7	8.2	1.6	2.9	6.9	12.9	4.5	17.3	.2	2.2	15.4
238	MISC. APPAREL AND ACCESSORIES. . . . .	72	47	3.4	16.6	3.1	5.5	13.2	26.9	27.7	54.4	1.0	4.7	31.4
2384	ROBES AND DRESSING GOWNS. . . . .	10	9	.5	2.2	.4	.7	1.7	2.6	1.8	4.8	.4	1.2	8.8
2385	WATERPROOF OUTERGARMENTS. . . . .	12	10	.9	4.3	.8	1.4	3.8	9.1	3.9	12.8	(7)	1.4	9.2
2387	APPAREL BELTS. . . . .	15	7	.5	2.9	.4	.8	2.0	4.3	5.2	9.6	(D)	.8	(D)
239	MISC. FABRICATED TEXTILE PRODUCTS. . . . .	312	100	9.4	51.2	8.0	14.8	37.1	91.3	83.2	174.2	2.3	10.2	77.4
2391	CURTAINS AND DRAPERIES. . . . .	73	21	1.7	8.7	1.5	2.7	6.3	16.0	18.0	33.9	.3	1.5	10.5
2392	HOUSEFURNISHINGS, NEC. . . . .	59	25	2.7	13.6	2.3	4.4	9.8	26.4	25.5	52.0	.5	2.9	20.6
2394	CANVAS AND RELATED PRODUCTS. . . . .	55	6	.5	2.9	.4	.8	1.9	5.1	5.7	10.7	.1	.5	4.2
2395	PLEATING AND STITCHING. . . . .	37	10	1.0	5.5	.9	1.5	4.5	12.1	3.4	15.5	(D)	.7	3.6
2396	AUTOMOTIVE AND APPAREL TRIMMINGS. . . . .	29	15	1.0	6.7	.9	1.7	5.2	12.6	12.6	25.1	.2	1.5	11.5
2399	FABRICATED TEXTILE PRODUCTS, NEC. . . . .	46	19	2.2	12.0	1.8	3.3	8.1	16.9	12.3	29.1	.5	2.4	18.8
24	LUMBER AND WOOD PRODUCTS. . . . .	1 256	227	20.5	147.7	17.2	33.1	109.4	306.2	420.1	721.7	34.8	(NA)	(NA)
2411	LOGGING CAMPS, LOGGING CONTRACTORS. . . . .	196	6	.7	3.5	.7	1.1	3.0	7.8	7.1	14.9	1.3	.8	7.1
242	SAWMILLS AND PLANING MILLS. . . . .	550	60	4.3	28.5	3.8	7.5	23.1	52.8	68.7	121.7	5.1	5.2	39.3
2421	SAWMILLS AND PLANING MILLS, GENERAL. . . . .	492	39	3.1	21.6	2.7	5.6	17.4	39.9	55.2	95.2	4.4	4.1	31.1
2435	HARDWOOD VENEER AND PLYWOOD. . . . .	5	4	.4	3.0	.4	.8	2.1	4.5	4.9	9.4	.3	(NA)	(NA)
2439	STRUCTURAL WOOD MEMBERS, NEC. . . . .	25	7	.4	2.8	.3	.5	1.7	5.0	6.9	11.8	.2	(NA)	(NA)
244	WOOD CONTAINERS. . . . .	64	25	1.4	8.8	1.2	2.5	6.7	14.5	22.0	36.7	.9	(NA)	(NA)
2441	NAILED WOOD BOXES AND SHOOK. . . . .	18	4	.3	1.9	.3	.6	1.4	3.1	3.9	7.0	.2	.6	4.5
2448	WOOD PALLETS AND SKIDS. . . . .	38	21	1.0	6.5	.9	1.8	5.0	10.1	16.3	26.5	.6	(NA)	(NA)
245	WOOD BUILDINGS AND MOBILE HOMES. . . . .	50	45	6.5	52.5	5.3	9.9	38.3	130.9	198.1	325.2	10.2	(NA)	(NA)
2451	MOBILE HOMES. . . . .	32	31	4.2	34.0	3.5	6.8	25.1	68.8	140.3	208.2	(D)	(NA)	(NA)
2452	PREFABRICATED WOOD BUILDINGS. . . . .	18	14	2.2	18.5	1.8	3.1	13.2	62.1	57.7	117.0	(D)	(NA)	(NA)
249	MISCELLANEOUS WOOD PRODUCTS. . . . .	185	28	2.5	16.2	2.0	3.9	11.0	31.2	41.5	73.0	13.1	(NA)	(NA)
2499	WOOD PRODUCTS, NEC. . . . .	176	24	2.3	15.2	1.9	3.7	10.3	29.3	37.9	67.1	12.1	(NA)	(NA)
25	FURNITURE AND FIXTURES. . . . .	473	218	24.6	185.6	19.8	39.4	133.3	326.1	280.9	598.3	13.3	27.2	253.3
2515	MATTRESSES AND BEDSPRINGS. . . . .	41	19	1.0	8.0	.8	1.5	4.4	17.4	22.0	39.3	.5	1.1	11.9
252	OFFICE FURNITURE. . . . .	33	21	4.8	40.8	3.8	7.7	29.1	71.4	54.0	123.1	(D)	4.1	43.2
2521	WOOD OFFICE FURNITURE. . . . .	15	6	.7	4.6	.6	1.1	3.0	8.8	5.3	14.1	(D)	.8	8.9
2522	METAL OFFICE FURNITURE. . . . .	18	15	4.1	36.2	3.2	6.6	26.1	62.6	48.7	109.0	1.6	3.3	34.3
254	PARTITIONS AND FIXTURES. . . . .	112	50	4.4	38.6	3.5	6.7	27.4	67.9	53.8	123.1	2.4	4.6	53.7
26	PAPER AND ALLIED PRODUCTS. . . . .	425	280	42.3	385.3	33.6	69.8	269.0	775.5	967.2	1 738.4	43.1	43.6	607.9
2621	PAPERMILLS, EXCEPT BUILDING PAPER. . . . .	27	23	9.7	103.9	7.5	16.6	71.5	173.1	229.3	400.4	11.9	9.8	142.9
2631	PAPERBOARD MILLS. . . . .	21	18	2.4	25.4	1.9	4.7	19.7	45.5	55.7	101.5	2.3	2.5	43.2
264	MISC. CONVERTED PAPER PRODUCTS. . . . .	151	81	12.7	111.2	10.3	20.4	76.2	289.2	362.0	652.0	14.0	12.9	206.8
2641	PAPER COATING AND GLAZING. . . . .	21	12	1.5	15.0	1.1	2.4	9.6	47.5	47.5	95.5	.9	2.2	62.7
2643	BAGS, EXCEPT TEXTILE BAGS. . . . .	29	13	2.2	18.2	1.7	3.7	13.7	43.3	49.4	91.8	2.0	2.2	33.5
2648	STATIONERY PRODUCTS. . . . .	36	14	1.8	12.3	1.4	2.7	8.7	25.1	28.0	52.8	2.2	(NA)	(NA)
2649	CONVERTED PAPER PRODUCTS, NEC. . . . .	26	21	2.5	19.3	2.1	4.2	12.6	41.4	34.0	76.4	2.2	(NA)	(NA)
265	PAPERBOARD CONTAINERS AND BOXES. . . . .	217	149	16.9	139.2	13.4	27.0	97.1	255.0	307.5	559.0	14.3	17.9	205.2
2651	FOLDING PAPERBOARD BOXES. . . . .	59	37	3.6	27.6	3.0	5.9	20.3	49.3	54.7	102.2	3.0	4.8	54.0
2652	SETUP PAPERBOARD BOXES. . . . .	44	30	2.0	11.7	1.8	3.5	9.1	19.2	14.7	34.0	.6	2.2	14.9
2653	CORRUGATED AND SOLID FIBER BOXES. . . . .	78	57	7.5	68.3	5.6	11.5	44.5	116.7	163.6	280.2	8.3	7.1	84.3
2654	SANITARY FOOD CONTAINERS. . . . .	19	14	2.6	21.7	2.0	4.2	15.2	49.3	48.3	95.9	1.7	2.4	33.4
2655	FIBER CANS, DRUMS, SIMILAR PRODUCTS. . . . .	17	11	1.2	10.0	1.0	1.9	8.0	20.6	26.1	46.7	.7	1.4	18.5
27	PRINTING AND PUBLISHING. . . . .	2 057	537	70.5	625.3	46.5	84.2	389.0	1 215.5	640.1	1 849.6	69.4	68.6	876.0
2711	NEWSPAPERS. . . . .	311	122	22.9	216.5	11.8	20.5	110.9	379.5	130.7	510.3	19.0	21.7	259.2
273	BOOKS. . . . .	93	33	5.1	43.6	3.4	6.5	26.5	74.9	45.7	119.2	1.6	5.2	68.7
2731	BOOK PUBLISHING. . . . .	45	15	2.2	20.5	1.0	2.0	8.4	41.5	27.4	66.9	.4	1.8	36.2
2732	BOOK PRINTING. . . . .	48	18	2.9	23.1	2.4	4.5	18.1	33.4	18.3	52.3	1.2	3.4	32.6
2741	MISCELLANEOUS PUBLISHING. . . . .	63	10	1.5	12.1	1.2	1.8	9.8	34.7	9.1	43.8	2.3	.5	4.3
275	COMMERCIAL PRINTING. . . . .	1 209	229	26.2	227.2	20.3	37.1	166.1	371.5	252.5	620.5	37.2	(NA)	(NA)
2751	COMMERCIAL PRINTING, LETTERPRESS. . . . .	722	67	8.0	62.3	6.2	12.0	44.7	113.5	73.8	186.9	5.9	(NA)	(NA)
2752	COMMERCIAL PRINTING, LITHOGRAPHIC. . . . .	442	145	15.0	130.3	11.3	19.8	92.0	207.2	127.3	331.5	22.8	(NA)	(NA)
2753	ENGRAVING AND PLATE PRINTING. . . . .	33	9	.5	4.2	.4	.7	2.9	7.8	3.5	11.3	.5	(NA)	(NA)
2754	COMMERCIAL PRINTING, GRAVURE. . . . .	12	8	2.7	30.4	2.4	4.5	26.5	43.0	47.9	90.8	8.0	(NA)	(NA)
278	BLANKBOOKS AND BOOKBINDING. . . . .	80	33	2.7	18.5	2.3	4.4	14.3	32.0	9.3	41.3	.8	3.3	28.8
2782	BLANKBOOKS AND LOOSELEAF BINDERS. . . . .	15	9	1.1	8.2	.9	1.9	6.1	15.4	5.4	20.7	.4	.8	7.9
2789	BOOKBINDING AND RELATED WORK. . . . .	65	24	1.6	10.3	1.4	2.5	8.1	16.6	4.0	20.5	.5	2.5	20.9
279	PRINTING TRADE SERVICES. . . . .	142	46	3.6	33.4	3.0	4.8	25.7	53.6	10.1	63.9	1.4	(NA)	(NA)
2791	TYPESETTING. . . . .	90	31	2.8	23.7	2.4	3.7	19.1	39.5	6.0	45.6	1.1	2.9	31.2
28	CHEMICALS AND ALLIED PRODUCTS. . . . .	625	257	49.3	495.1	30.6	59.2	263.4	1 771.4	1 198.0	2 958.8	104.3	49.5	1 361.1
281	INDUSTRIAL INORGANIC CHEMICALS. . . . .	78	42	5.7	55.4	3.6	7.6	33.5	203.5	198.0	401.2	15.2	(NA)	(NA)

See footnotes at end of table.

TABLE 3. General Statistics for the State, by Industry Groups and Industries: 1972 and 1967—Continued

(See appendix, Explanation of Terms)

Code	Industry	1972										1967		
		Establishments		All employees		Production workers			Value added by manufacture	Cost of materials <sup>1</sup>	Value of shipments <sup>1</sup>	Capital expenditures, 1966	All employees	Value added by manufacture
		Total	With 20 employees or more	Number	Payroll	Number	Man-hours	Wages						
		(number)	(number)	(1,000)	(million dollars)	(1,000)	(million)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(1,000)	(million dollars)	
2816	INORGANIC PIGMENTS . . . . .	11	8	1.5	13.5	1.0	2.1	8.6	47.4	55.6	104.6	(D)	1.2	22.0
282	PLASTICS MATERIALS AND SYNTHETICS . . . . .	27	22	10.9	111.6	7.2	14.0	66.1	225.0	279.4	507.8	31.5	(NA)	(NA)
283	DRUGS . . . . .	69	31	12.9	149.8	7.7	14.8	76.4	897.6	236.1	1 120.6	28.4	12.2	641.3
2834	PHARMACEUTICAL PREPARATIONS. . . . .	53	23	11.9	139.0	7.0	13.5	69.7	862.7	212.5	1 064.7	20.4	FF	(D)
284	SOAPS, CLEANERS, AND TOILET GOODS. . . . .	130	32	3.3	25.4	2.2	4.3	14.3	97.0	77.4	175.8	2.7	(NA)	(NA)
2851	PAINTS AND ALLIED PRODUCTS . . . . .	66	36	4.4	45.5	2.6	5.1	21.1	119.0	116.0	236.7	3.6	4.4	75.4
286	INDUSTRIAL ORGANIC CHEMICALS . . . . .	46	24	4.2	42.0	2.5	5.4	23.0	94.9	149.5	244.8	14.6	(NA)	(NA)
287	AGRICULTURAL CHEMICALS . . . . .	47	16	1.5	13.5	.8	1.7	5.5	23.4	41.3	64.1	1.2	(NA)	(NA)
2875	FERTILIZERS, MIXING ONLY . . . . .	27	9	.5	3.4	.4	.8	2.1	7.8	20.8	28.0	.2	CC	(D)
2879	AGRICULTURAL CHEMICALS . . . . .	14	4	.8	8.2	.2	.5	2.1	10.4	11.6	22.5	.4	(NA)	(NA)
289	MISCELLANEOUS CHEMICAL PRODUCTS. . . . .	162	54	6.4	51.7	4.0	6.2	23.5	111.1	100.3	207.8	7.0	(NA)	(NA)
2899	CHEMICAL PREPARATIONS, NEC . . . . .	108	27	2.7	26.7	1.4	2.7	9.5	56.6	54.8	110.7	3.4	(NA)	(NA)
29	PETROLEUM AND COAL PRODUCTS. . . . .	154	49	11.8	132.4	8.3	16.0	87.8	373.4	1 399.5	1 787.2	111.5	12.9	311.3
2911	PETROLEUM REFINING . . . . .	18	15	8.7	97.3	6.3	11.7	69.7	284.7	1 275.7	1 574.8	104.1	9.9	256.5
295	PAVING AND ROOFING MATERIALS . . . . .	94	16	1.8	18.9	1.3	2.8	11.8	55.9	73.0	128.6	5.1	1.8	30.3
2951	PAVING MIXTURES AND BLOCKS . . . . .	87	12	1.1	12.2	.7	1.6	6.8	31.5	44.3	75.4	4.3	1.1	17.3
2952	ASPHALT FELTS AND COATINGS . . . . .	7	4	.7	6.7	.5	1.2	5.0	24.4	28.7	53.2	.8	.7	13.1
299	MISC. PETROLEUM AND COAL PRODUCTS. . . . .	43	19	1.4	16.3	.7	1.4	6.2	32.9	50.9	83.8	2.2	(NA)	(NA)
30	RUBBER AND MISC. PLASTICS PROD . . . . .	456	218	36.0	293.7	27.8	55.4	206.6	665.1	557.0	1 205.8	45.4	(NA)	(NA)
3021	RUBBER AND PLASTICS FOOTWEAR . . . . .	9	7	2.2	10.5	2.0	3.6	8.9	16.8	13.9	31.2	2.4	(NA)	(NA)
3079	MISCELLANEOUS PLASTICS PRODUCTS. . . . .	382	172	21.5	159.1	16.6	32.8	110.2	337.2	290.6	625.6	27.1	(NA)	(NA)
31	LEATHER AND LEATHER PRODUCTS . . . . .	191	141	23.6	127.0	20.9	39.3	102.8	235.4	219.1	458.2	6.1	29.0	195.4
3111	LEATHER TANNING AND FINISHING. . . . .	19	13	1.6	13.9	1.3	2.7	10.9	25.3	48.4	74.5	.9	1.9	18.9
314	FOOTWEAR, EXCEPT RUBBER. . . . .	96	86	18.8	94.8	16.8	31.4	78.6	176.9	136.7	317.0	4.1	23.4	150.3
3161	LUGGAGE. . . . .	16	12	.9	4.8	.7	1.3	3.3	8.8	9.6	18.2	.3	.8	6.2
32	STONE, CLAY, AND GLASS PRODUCTS. . . . .	925	380	55.7	500.1	45.0	91.9	380.8	1 089.6	705.1	1 784.1	105.7	57.6	755.1
322	GLASS, GLASSWARE, PRESSED OR BLOWN . . . . .	41	29	15.1	133.7	13.2	26.6	110.5	297.9	130.5	424.3	19.0	13.7	178.1
3231	PRODUCTS OF PURCHASED GLASS. . . . .	65	27	5.0	48.8	4.0	8.0	36.5	101.6	125.2	226.0	8.4	4.2	49.4
3241	CEMENT, HYDRAULIC. . . . .	19	17	3.3	38.3	2.8	5.8	32.0	103.8	69.3	172.1	8.2	3.8	77.5
3259	STRUCTURAL CLAY PRODUCTS, NEC. . . . .	5	3	.4	3.2	.3	.7	2.8	5.8	2.8	8.1	(D)	CC	(D)
326	POTTERY AND RELATED PRODUCTS . . . . .	33	18	4.8	36.9	4.0	8.1	28.8	66.1	20.0	86.4	(D)	4.7	48.3
3264	PORCELAIN ELECTRICAL SUPPLIES. . . . .	9	7	1.4	11.7	1.1	2.3	8.4	18.6	6.5	25.5	(D)	1.2	14.0
3269	POTTERY PRODUCTS, NEC. . . . .	16	4	.4	2.0	.3	.6	1.4	5.7	2.0	7.7	(D)	.5	4.0
327	CONCRETE, GYPSUM, PLASTER PRODUCTS . . . . .	470	119	8.4	75.2	6.4	13.5	53.6	158.0	150.7	307.2	15.6	8.5	109.3
3272	CONCRETE PRODUCTS, NEC . . . . .	184	42	3.4	29.0	2.7	5.7	21.2	57.1	35.4	91.3	3.9	2.3	25.4
3273	READY-MIXED CONCRETE . . . . .	177	42	2.4	22.7	1.7	3.5	15.8	49.2	62.7	111.8	5.3	3.0	45.5
329	MISC. NONMETALLIC MINERAL PRODUCTS . . . . .	164	95	9.8	89.6	7.5	15.4	63.3	186.1	131.7	315.2	12.2	(NA)	(NA)
3291	ABRASIVE PRODUCTS. . . . .	32	20	1.6	15.0	1.1	2.2	9.4	29.3	19.6	48.9	.9	2.0	29.3
3292	ASBESTOS PRODUCTS. . . . .	12	9	2.2	19.9	1.7	3.4	14.0	37.9	28.5	65.6	1.7	(NA)	(NA)
3295	MINERALS, GROUND OR TREATED. . . . .	50	22	1.2	11.3	1.0	2.1	9.0	27.1	15.7	41.8	3.2	1.0	18.0
33	PRIMARY METAL INDUSTRIES . . . . .	586	365	193.0	2 098.4	154.6	300.3	1 588.6	3 689.0	5 591.4	9 132.4	291.2	233.1	3 540.7
331	BLAST FURNACE, BASIC STEEL PROD. . . . .	146	117	146.7	1 666.4	117.6	226.3	1 272.8	2 964.5	4 545.1	7 373.0	234.3	177.2	2 815.4
3312	BLAST FURNACES AND STEEL MILLS . . . . .	74	58	132.3	1 524.3	106.2	203.9	1 164.4	2 634.3	4 078.1	6 590.0	(D)	164.9	2 660.9
3315	STEEL WIRE AND RELATED PRODUCTS. . . . .	24	18	4.4	41.0	3.3	6.0	27.9	88.9	81.7	169.4	2.8	3.0	44.7
3316	COLD FINISHING OF STEEL SHAPES . . . . .	16	14	5.5	56.0	4.4	8.9	45.5	149.2	247.3	393.5	6.0	FF	(D)
332	IRON AND STEEL FOUNDRIES . . . . .	129	99	19.8	179.9	16.4	31.7	138.2	267.1	192.5	458.9	16.5	23.9	297.3
3321	GRAY IRON FOUNDRIES. . . . .	88	65	7.7	68.2	6.5	12.5	53.6	114.0	99.6	212.1	7.6	8.1	87.4
3325	STEEL FOUNDRIES, NEC . . . . .	32	25	8.2	77.0	6.7	12.9	58.2	104.6	70.2	175.2	5.5	(NA)	(NA)
333	PRIMARY NONFERROUS METALS. . . . .	13	7	3.3	36.9	2.5	5.3	24.5	59.0	130.8	192.6	5.3	3.6	63.4
3341	SECONDARY NONFERROUS METALS. . . . .	35	19	2.2	19.1	1.6	2.9	11.9	40.1	171.1	208.3	3.9	1.9	22.7
335	NONFERROUS ROLLING AND DRAWING . . . . .	65	47	12.0	117.0	9.1	19.5	82.4	218.6	439.6	650.0	22.1	12.7	201.7
3351	COPPER ROLLING AND DRAWING . . . . .	17	13	4.4	45.0	3.3	7.2	31.6	91.2	153.9	238.9	5.1	4.6	78.7
3356	NONFERROUS ROLLING, DRAWING, NEC . . . . .	18	10	1.5	15.1	1.1	2.4	11.0	36.2	46.3	82.7	2.0	EE	(D)
3357	NONFERROUS WIRE DRAWING, INSULATING. . . . .	19	17	2.7	21.4	2.1	4.3	15.0	31.9	91.0	123.6	2.1	2.8	42.5
336	NONFERROUS FOUNDRIES . . . . .	128	51	7.2	63.0	6.0	11.7	47.4	106.8	73.7	178.0	6.2	7.5	88.2
3361	ALUMINUM FOUNDRIES . . . . .	64	25	3.5	32.3	3.0	5.8	25.3	56.9	32.2	88.5	2.8	3.3	39.8

See footnotes at end of table.



TABLE 3. General Statistics for the State, by Industry Groups and Industries: 1972 and 1967—Continued

(See appendix, Explanation of Terms)

Code	Industry	1972											1967	
		Establishments		All employees		Production workers			Value added by manufacture	Cost of materials <sup>1</sup>	Value of shipments <sup>1</sup>	Capital expenditures, new	All employees	Value added by manufacture
		Total	With 20 employees or more	Number	Payroll	Number	Man-hours	Wages						
		(number)	(number)	(1,000)	(million dollars)	(1,000)	(million)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(1,000)	(million dollars)
3362	BRASS, BRONZE, AND COPPER FOUNDRIES.	54	21	3.4	28.7	2.8	5.5	20.6	47.4	39.8	85.3	3.4	3.8	44.3
3369	NONFERROUS FOUNDRIES, NEC. . . . .	10	5	.3	1.9	.2	.4	1.6	2.5	1.7	4.3	.1	.4	4.2
339	MISC. PRIMARY METAL PRODUCTS . . . .	70	25	1.8	16.2	1.4	2.9	11.2	32.9	38.6	71.6	2.9	(NA)	(NA)
3398	METAL HEAT TREATING. . . . .	45	10	.7	6.4	.5	1.0	4.1	11.0	3.9	14.9	1.3	(NA)	(NA)
3399	PRIMARY METAL PRODUCTS, NEC. . . . .	25	15	1.1	9.8	.9	1.8	7.1	21.9	34.7	56.7	1.6	(NA)	(NA)
34	FABRICATED METAL PRODUCTS. . . . .	1 810	809	112.1	1 036.5	85.5	168.4	733.4	1 906.3	1 899.6	3 792.5	90.0	(NA)	(NA)
341	METAL CANS AND SHIPPING CONTAINERS	30	26	5.8	58.5	5.1	10.5	49.6	114.4	198.6	311.1	6.6	(NA)	(NA)
342	CUTLERY, HANDTOOLS AND HARDWARE. .	116	62	8.1	63.5	6.7	13.4	47.3	125.7	84.1	205.8	5.6	7.0	79.1
3421	CUTLERY. . . . .	4	4	.6	3.9	.6	1.2	3.4	7.4	4.3	10.8	.2	.6	4.9
3423	HAND AND EDGE TOOLS, NEC. . . . .	45	20	3.4	29.9	2.8	5.7	22.8	61.6	34.3	92.7	2.3	3.0	37.1
3429	HARDWARE, NEC. . . . .	61	34	3.8	28.0	3.1	6.1	19.7	54.1	43.1	97.2	3.1	2.9	31.3
343	PLUMBING, HEATING, EXC. ELECTRIC .	69	37	5.9	53.8	4.2	8.4	33.9	106.9	95.0	204.3	(D)	(NA)	(NA)
3433	HEATING EQUIPMENT, EXCEPT ELECTRIC	47	26	4.1	37.7	2.9	5.7	22.8	74.9	67.9	144.2	(D)	(NA)	(NA)
344	FABRICATED STRUCTURAL METAL PROD .	713	300	34.4	313.9	24.6	46.0	199.9	553.9	639.7	1 203.2	24.9	42.4	533.9
3441	FABRICATED STRUCTURAL METAL PRODUCTS	159	91	10.8	104.0	8.0	14.9	69.0	165.1	221.6	397.6	6.4	13.9	162.4
3442	METAL DOORS, SASH, AND TRIM. . . . .	84	28	3.5	27.7	2.5	4.9	17.1	51.4	48.4	99.1	5.7	5.0	49.0
3443	FABRICATED PLATEWORK (BOILERS SHOP).	119	78	11.4	104.8	7.8	14.1	64.7	201.5	188.8	390.0	5.1	13.7	195.0
3444	SHEET METALWORK. . . . .	176	54	4.7	41.6	3.5	6.5	27.1	73.6	104.5	178.4	5.6	4.5	74.4
3446	ARCHITECTURAL METALWORK. . . . .	140	30	2.5	21.3	1.8	3.6	14.3	35.7	32.2	67.3	1.2	3.0	31.0
3451	SCREW MACHINE PRODUCTS . . . . .	73	25	1.6	12.4	1.3	2.6	9.0	23.5	13.8	36.7	.7	1.9	23.2
346	METAL FORGINGS AND STAMPINGS . . . .	143	72	16.3	176.6	12.8	26.3	143.7	312.8	266.9	575.8	10.1	(NA)	(NA)
3466	CROWNS AND CLOSURES. . . . .	7	6	1.3	12.1	1.1	2.3	9.3	29.5	30.3	58.7	(D)	(NA)	(NA)
3469	METAL STAMPINGS, NEC. . . . .	96	33	3.5	28.7	2.8	5.7	30.9	58.4	49.2	106.7	(D)	(NA)	(NA)
347	METAL SERVICES, NEC. . . . .	213	60	3.8	31.4	3.0	5.7	21.6	57.9	57.1	113.7	4.0	3.8	42.1
3471	PLATING AND POLISHING. . . . .	134	32	1.9	14.2	1.5	2.9	10.2	24.5	10.9	35.2	2.4	2.0	20.3
3479	METAL COATING AND ALLIED SERVICES. .	79	28	1.9	17.2	1.5	2.8	11.4	33.4	46.2	78.4	1.7	1.7	21.8
349	MISC. FABRICATED METAL PRODUCTS. .	375	173	22.5	199.2	16.6	32.7	132.0	395.0	316.1	697.2	17.1	(NA)	(NA)
3494	VALVES AND PIPE FITTINGS . . . . .	74	49	10.6	96.8	7.4	14.7	62.2	194.1	126.1	312.6	8.7	11.1	160.7
3495	WIRE SPRINGS. . . . .	10	9	.9	7.0	.7	1.3	4.9	15.1	8.2	23.2	.2	(NA)	(NA)
3496	MISC. FABRICATED WIRE PRODUCTS . . . .	85	31	3.3	27.3	2.6	5.3	18.6	52.4	49.2	100.8	2.3	(NA)	(NA)
3498	FABRICATED PIPE AND FITTINGS . . . . .	41	27	2.1	20.2	1.5	2.7	13.1	49.6	48.6	95.3	1.0	3.4	47.2
3499	FABRICATED METAL PRODUCTS, NEC. . . .	144	45	3.7	29.3	2.9	5.7	20.4	49.8	47.9	96.1	2.9	(NA)	(NA)
35	MACHINERY, EXCEPT ELECTRICAL. . . .	2 195	634	122.5	1 264.9	81.4	164.2	739.6	2 342.8	1 727.5	4 026.6	106.7	138.3	1 946.5
353	CONSTRUCTION AND RELATED MACHINERY	142	78	19.7	202.2	12.6	25.5	118.2	441.2	375.2	806.0	24.1	19.2	301.9
3535	CONVEYORS AND CONVEYING EQUIPMENT. .	29	14	3.5	34.0	2.0	3.8	16.1	61.8	42.6	103.8	1.6	4.2	60.7
354	METALWORKING MACHINERY. . . . .	512	141	19.1	192.3	13.8	28.2	128.4	351.9	174.8	513.4	10.7	23.0	334.3
3541	MACHINE TOOLS, METAL CUTTING TYPES .	37	9	1.5	15.1	.9	2.3	9.1	23.9	10.4	32.8	.5	1.8	27.5
3542	MACHINE TOOLS, METAL FORMING TYPES .	22	8	1.3	12.5	.9	1.6	7.2	17.5	14.6	33.3	.8	1.6	26.0
3544	SPECIAL DIES, TOOLS, JIGS, FIXTURES. .	374	82	6.5	70.2	5.4	11.6	54.7	123.7	40.0	163.3	4.6	5.7	76.5
3549	METALWORKING MACHINERY, NEC. . . . .	16	11	1.0	9.9	.6	1.4	5.4	19.5	8.6	27.0	.3	(NA)	(NA)
355	SPECIAL INDUSTRY MACHINERY . . . . .	218	97	15.5	150.4	9.7	19.0	81.0	257.1	219.1	474.6	10.1	20.6	243.9
3551	FOOD PRODUCTS MACHINERY. . . . .	34	18	1.3	12.8	.9	1.7	7.2	23.2	13.4	36.3	.8	1.1	12.6
3552	TEXTILE MACHINERY. . . . .	39	17	5.5	47.6	3.9	7.2	30.9	58.0	43.9	103.8	5.1	6.9	57.4
3553	WOODWORKING MACHINERY. . . . .	11	4	.5	4.0	.4	.7	2.8	7.4	7.3	14.5	.2	.6	8.7
3554	PAPER INDUSTRIES MACHINERY . . . . .	19	10	1.8	18.8	1.1	2.4	9.5	26.7	20.1	44.5	.8	1.8	17.8
3555	PRINTING TRADES MACHINERY. . . . .	27	11	1.5	15.5	.9	1.9	8.2	31.2	26.5	60.3	.4	2.3	35.2
3559	SPECIAL INDUSTRY MACHINERY, NEC. . . .	88	37	5.0	51.7	2.6	5.1	22.4	110.6	107.9	215.2	3.0	7.9	112.3
356	GENERAL INDUSTRIAL MACHINERY . . . .	279	111	25.1	249.3	16.9	34.3	151.3	472.1	340.9	796.6	16.2	30.3	448.9
3562	BALL AND ROLLER BEARINGS . . . . .	17	13	4.7	48.6	3.6	7.2	34.9	91.0	63.2	151.7	6.8	FF	(D)
3564	BLOWERS AND FANS . . . . .	23	9	1.0	8.7	.7	1.4	5.4	26.4	11.2	37.6	(D)	1.1	16.0
3565	INDUSTRIAL PATTERNS. . . . .	93	8	.6	6.2	.6	1.1	5.3	9.9	2.3	12.2	.2	.8	9.8
3567	INDUSTRIAL FURNACES AND OVENS. . . . .	26	16	3.1	30.5	1.9	3.7	16.7	46.5	49.6	98.2	1.2	3.8	71.7
3569	GENERAL INDUSTRIAL MACHINERY, NEC. .	52	23	2.8	27.0	1.7	3.6	14.5	43.9	40.4	85.1	1.5	4.0	48.7
358	REFRIGERATION, SERVICE MACHINERY . .	110	54	10.0	103.2	6.8	13.4	54.9	154.1	160.3	316.2	7.1	9.8	129.4
3589	SERVICE INDUSTRY MACHINERY, NEC. . .	38	13	1.5	14.2	1.1	2.2	9.4	30.6	27.3	56.3	1.4	1.4	18.4
359	MISC. MACHINERY, EXCEPT ELECTRICAL	867	132	10.1	90.3	8.0	16.3	65.5	155.9	80.1	236.3	9.0	(NA)	(NA)
36	ELECTRIC, ELECTRONIC EQUIPMENT . . . .	685	371	116.3	1 051.2	81.6	161.1	639.5	2 277.7	1 520.8	3 658.4	104.7	(NA)	(NA)
361	ELECTRIC DISTRIBUTING EQUIPMENT. . . .	53	35	26.4	275.1	18.8	36.6	181.6	495.9	296.7	789.9	10.0	(NA)	(NA)
3612	TRANSFORMERS . . . . .	11	10	9.4	98.3	7.0	14.4	69.1	146.8	118.6	268.3	3.7	FF	(D)
3613	SWITCHGEAR AND SWITCHBOARD APPARATUS	43	26	16.9	176.8	11.9	22.2	112.5	349.1	178.1	521.7	6.2	17.3	307.3
362	ELECTRICAL INDUSTRIAL APPARATUS. . . .	107	55	12.1	106.0	8.0	16.3	62.7	212.9	140.7	351.6	10.3	15.3	211.5
3621	MOTORS AND GENERATORS. . . . .	25	17	5.0	46.2	3.1	6.5	24.9	89.6	52.1	143.2	3.7	8.9	126.8
3622	INDUSTRIAL CONTROLS. . . . .	42	14	1.4	11.9	.9	1.8	6.2	20.1	18.5	38.6	.5	1.0	12.8
3623	WELDING APPARATUS, ELECTRIC. . . . .	11	7	1.5	14.5	.9	2.0	8.8	34.8	34.8	68.6	1.0	1.3	28.0
3624	CARBON AND GRAPHITE PRODUCTS . . . .	12	7	3.3	25.4	2.4	4.6	18.0	53.2	26.6	77.7	4.9	FF	(D)
3629	ELECTRICAL INDUSTRIAL APPARATUS, NEC	17	10	.9	8.0	.7	1.3	4.8	15.4	8.6	23.6	.3	CC	(D)

See footnotes at end of table.

TABLE 3. General Statistics for the State, by Industry Groups and Industries: 1972 and 1967—Continued

(See appendix, Explanation of Terms)

Code	Industry	1972											1967	
		Establishments		All employees		Production workers			Value added by manufacture	Cost of materials <sup>1</sup>	Value of shipments <sup>1</sup>	Capital expenditures, 1967	All employees	Value added by manufacture
		Total	With 20 employees or more	Number	Payroll	Number	Man-hours	Wages	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(1,000)	(million dollars)
		(number)	(number)	(1,000)	(million dollars)	(1,000)	(million)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(1,000)	(million dollars)
364	ELECT. LIGHTING AND WIRING EQUIP. . . . .	158	93	15.0	111.8	12.3	24.0	78.5	301.1	237.8	534.3	12.3	14.0	212.5
3643	CURRENT-CARRYING WIRING DEVICES. . . . .	38	25	4.4	34.9	3.3	6.6	21.4	75.8	57.2	131.0	4.6	2.6	49.0
3645	RESIDENTIAL LIGHTING FIXTURES. . . . .	53	28	4.0	28.3	3.3	6.5	19.5	71.7	59.7	128.1	1.9	(NA)	(NA)
3648	LIGHTING EQUIPMENT, NEC. . . . .	12	7	.5	3.2	.4	.8	2.2	5.8	7.4	13.0	.3	(NA)	(NA)
366	COMMUNICATION EQUIPMENT. . . . .	88	43	14.8	155.1	6.5	13.1	50.3	240.0	235.2	471.0	14.4	18.9	240.1
367	ELECTRONIC COMPONENTS AND ACCESS. . . . .	155	90	31.1	269.3	23.1	44.8	167.9	582.1	287.2	857.0	46.9	39.2	505.0
369	MISC. ELECTRICAL EQUIP. & SUPPLIES . . . . .	74	32	5.1	44.5	4.0	8.0	33.1	107.4	89.6	194.2	3.6	5.5	65.9
3691	STORAGE BATTERIES. . . . .	15	10	3.0	30.0	2.3	4.8	22.3	76.7	62.8	136.9	2.8	FF	(D)
3694	ENGINE ELECTRICAL EQUIPMENT. . . . .	17	10	1.0	8.0	.8	1.7	6.1	13.8	13.2	26.7	.3	1.4	15.6
37	TRANSPORTATION EQUIPMENT . . . . .	294	150	67.3	701.7	47.8	91.1	436.2	1 314.8	1 451.2	2 745.4	(D)	(NA)	(NA)
3713	TRUCK AND BUS BODIES . . . . .	43	20	2.3	18.0	1.9	3.7	13.7	28.0	33.1	60.5	1.0	2.0	19.2
3714	MOTOR VEHICLE PARTS AND ACCESSORIES. . . . .	61	28	7.4	73.4	6.1	12.1	58.0	159.0	142.1	297.8	(D)	FF	(D)
372	AIRCRAFT AND PARTS . . . . .	32	18	11.4	127.3	7.2	15.0	66.5	230.9	110.0	340.5	(D)	(NA)	(NA)
3728	AIRCRAFT EQUIPMENT, NEC. . . . .	18	9	1.3	13.4	.8	1.6	7.2	19.9	10.0	30.5	.4	(NA)	(NA)
373	SHIP, BOAT BUILDING, REPAIRING . . . . .	25	9	6.8	70.3	5.4	10.7	50.4	106.4	74.0	181.0	6.8	FF	(D)
3731	SHIP BUILDING AND REPAIRING. . . . .	11	5	6.4	66.0	5.0	9.9	47.0	97.9	66.5	164.5	6.3	FF	(D)
3732	BOAT BUILDING AND REPAIRING. . . . .	14	3	.5	4.3	.4	.9	3.4	8.5	7.5	16.6	.5	CC	(D)
38	INSTRUMENTS AND RELATED PRODUCTS	371	141	34.2	310.7	21.5	43.3	164.2	620.7	333.6	942.1	22.8	(NA)	(NA)
382	MEASURING AND CONTROLLING DEVICES. . . . .	104	48	18.1	175.2	10.8	22.1	89.5	340.8	162.5	495.1	9.9	(NA)	(NA)
3825	INSTRUMENTS TO MEASURE ELECTRICITY . . . . .	40	20	3.7	34.3	2.3	4.9	17.4	57.8	34.9	89.4	2.6	(NA)	(NA)
3832	OPTICAL INSTRUMENTS AND LENSES . . . . .	32	7	.9	8.8	.6	1.2	4.7	19.5	7.2	24.9	.4	(NA)	(NA)
384	MEDICAL INSTRUMENTS AND SUPPLIES . . . . .	104	40	9.3	79.9	6.0	11.8	41.2	159.2	94.4	255.0	5.5	7.4	95.9
3841	SURGICAL AND MEDICAL INSTRUMENTS . . . . .	26	11	1.3	9.7	1.0	2.0	6.1	16.6	12.5	28.4	(D)	.9	9.3
3842	SURGICAL APPLIANCES AND SUPPLIES . . . . .	55	18	6.2	58.1	3.6	7.1	27.4	106.8	65.6	177.7	3.0	4.4	60.7
3843	DENTAL EQUIPMENT AND SUPPLIES. . . . .	23	11	1.8	12.0	1.4	2.7	7.7	35.7	16.2	48.8	(D)	2.1	25.9
3861	PHOTOGRAPHIC EQUIPMENT AND SUPPLIES. . . . .	25	8	.7	6.6	.5	1.0	4.1	20.7	10.9	32.2	2.0	.4	5.1
3873	WATCHES, CLOCKS, AND WATCHCASES. . . . .	6	4	.7	5.3	.5	.9	2.9	8.7	15.3	23.0	.1	(NA)	(NA)
39	MISC. MANUFACTURING INDUSTRIES . . . . .	655	188	30.8	243.2	24.0	47.3	174.5	537.9	449.5	987.1	(D)	26.1	310.8
3911	JEWELRY, PRECIOUS METAL. . . . .	53	8	.4	3.2	.3	.6	2.0	6.9	8.1	14.8	.3	.4	4.2
394	TOYS AND SPORTING GOODS. . . . .	123	55	8.8	67.4	7.0	13.9	54.9	115.5	174.0	295.0	7.0	5.6	45.2
3944	GAMES, TOYS, AND CHILDREN'S VEHICLES . . . . .	38	22	3.2	18.8	2.7	5.1	14.9	35.4	34.1	67.2	2.9	(NA)	(NA)
3949	SPORTING AND ATHLETIC GOODS, NEC. . . . .	65	30	5.3	46.8	4.0	8.3	38.4	77.9	136.9	222.3	4.1	EE	(D)
395	PENS, PENCILS, OFFICE, ART GOODS . . . . .	52	17	2.8	20.2	2.0	4.3	13.1	39.6	23.9	62.9	1.2	2.9	31.0
396	COSTUME JEWELRY AND NOTIONS. . . . .	29	11	3.0	21.5	2.2	4.0	13.1	30.1	23.7	53.6	1.1	2.7	22.6
3962	ARTIFICIAL FLOWERS . . . . .	16	5	.9	5.0	.8	1.4	3.8	10.6	11.6	21.9	.2	.6	4.1
399	MISCELLANEOUS MANUFACTURES . . . . .	358	86	14.5	121.0	11.4	22.5	84.6	327.5	205.1	528.2	21.0	13.3	196.8
3991	BROOMS AND BRUSHES . . . . .	23	7	.6	4.3	.5	.9	2.4	6.9	7.4	14.2	.2	.5	4.6
3993	SIGNS AND ADVERTISING DISPLAYS . . . . .	152	22	2.0	17.9	1.5	3.0	11.6	31.8	16.9	48.7	1.1	2.2	25.3
3999	MANUFACTURING INDUSTRIES, NEC. . . . .	163	41	6.1	42.1	4.7	8.9	27.1	107.9	60.4	167.5	6.9	4.7	43.6
—	ADMINISTRATIVE AND AUXILIARY . . . . .	561	313	87.5	1 159.0	—	—	—	—	—	—	—	80.6	—

Note: The following symbols indicate employment size range for 1967:

AA less than 250 employees      EE 1,000 to 2,499 employees  
BB 250 to 499 employees      FF 2,500 employees and over  
CC 500 to 999 employees

- Represents zero. (NA) Not available. Because of a revision to this industry or industry group in the 1972 edition of the SIC manual, 1967 census data are not available on a comparable basis. (D) Withheld to avoid disclosing figures for individual companies. (Z) Less than half of the unit of measurement shown.

<sup>1</sup>The total cost of materials and value of shipments for industry group shown may include extensive duplication arising from shipments between establishments in the same industry classification. (For a more complete explanation, see appendix.)

<sup>2</sup>Includes figures for industry groups which have been withheld from publication in order to (a) avoid disclosing figures for individual companies or (b) permit further checking of figures for smaller industry groups. Additional detail will appear in the final report for this State.



## Appendix A. SCOPE AND COVERAGE

This report is one of a series presenting preliminary information, by State, from the 1972 Census of Manufactures. The data will be superseded in a final report which, in turn, will be included in *Volume III, Area Statistics, 1972 Census of Manufactures*. The final report will include a comprehensive discussion of the concepts and definitions used in the census.

The census of manufactures covers each manufacturing establishment in the United States with one paid employee or more; manufacturing establishments with no employees are excluded. Firms which operated more than one establishment were required to file a separate report for each location. Companies which engaged in distinctly different lines of activity at one location were asked to submit separate reports if the company records permitted such a separation and the activities were of significant size.

This report includes figures for administrative offices, warehouses, garages, or other auxiliary units which service manufacturing establishments.

In the 1972 census, the approximately 120,000 manufacturing establishments with fewer than 10 employees were excused from filing reports. Under special arrangements which safeguarded the confidentiality of both tax and census records, data on payrolls, sales, and industry classification from the administrative records of the Social Security Administration and the Internal Revenue Service were made available to the Census Bureau for use in the 1972 Economic Censuses (retail and wholesale trade, service industries, construction industries, manufactures, and mineral industries). Estimates for data other than payrolls and sales for these small establishments were constructed from industry averages. The effect on industry aggregates is slight in most industries. For manufacturing as a whole, these small establishments account for less than 3 percent of the payrolls and value added.

Establishments are classified by industry in accordance with industry definitions described in the 1972 edition of the Standard Industrial Classification (SIC) Manual. For 1972, the SIC was significantly revised and the comparability with prior year's data for some industries was significantly affected. The comparability at the 2- and 3-digit SIC levels was less affected. The final volumes of the 1972 Census of Manufactures will contain a table relating aggregates based on the 1972 SIC with aggregates derived from classifying establishments according to the 1967 SIC definitions.

As in earlier censuses, a number of small establishments may have been misclassified as to industry. However, such possible misclassifications have significant effect on *none* of the statistics except the number of establishments. As indicated above, report forms were not mailed to very small establishments (fewer than 10 employees). The industry classifications for these establishments were assigned on the basis of brief descriptions of the general activity of the establishment. Where the description is incomplete or there are relatively fine lines of demarcation among industries or between manufacturing and nonmanufacturing activity, the code assigned to an establishment could differ from that which would have been assigned on the basis of more complete product information. Therefore, the total establishment count for individual industries should be viewed as an approximation rather than a precise measurement. The counts for establishments with 20 employees or more are more reliable than the total number of establishments.

More detailed figures for this State will appear in the final census reports. Final reports will also include a comprehensive discussion of such concepts as "industry" and "establishment," as well as the various statistical items such as "employment," "value of shipments," and "value added." Similar preliminary and final reports will be issued for other States during the coming months. A series of preliminary summary reports showing U.S. totals for each manufacturing industry and for each State are being issued. Final industry reports and final area reports will be published during 1974.

Order forms describing the individual reports and listing their prices may be obtained from any U.S. Department of Commerce district office or from the Publications Distribution Section, Social and Economic Statistics Administration, Washington, D.C. 20233.

The 1972 Census of Manufactures is the 29th census of manufacturing establishments in the United States. For 1972, it was conducted jointly with the censuses of mineral industries, construction industries, retail trade, wholesale trade, and selected services under authority of Title 13 of the United States Code. Title 13 specifies that a census of manufactures be conducted every 5 years and, as amended, to cover years ending in "2" and "7". Title 13 also authorizes an annual sample survey of manufacturing establishments in interim years.



## Appendix B. EXPLANATION OF TERMS

*(For a more complete discussion of these terms and the method of compiling the Census of Manufactures, see the "Introduction" to the 1967 Census of Manufactures, Volume III).*

**All Employees**—All full-time and part-time employees on the payrolls of operating manufacturing establishments for any part of the pay period ending nearest the 12th of the months specified on the report form. Included are all persons on paid sick leave, paid holidays, and paid vacations during these pay periods. Officers of corporations are included as employees; proprietors and partners of unincorporated firms are excluded. The "all employee" number is the average number of production workers for the midmonth payroll period of March, May, August, and November plus the number of nonproduction employees in mid-March.

**Number of Production Workers**—Workers (up through the working foreman level) engaged in fabricating, processing, assembling, inspecting, receiving, packing, warehousing, shipping (but not delivering), and maintenance, repair, janitorial, and watchman services, product development, auxiliary production for plant's own use (e.g., powerplant), recordkeeping, and other closely associated services. Proprietors and partners are excluded.

**Payroll**—This item includes all forms of compensation such as salaries, wages, commissions, dismissal pay, bonuses, vacation and sick leave pay, and compensation in kind, prior to such deductions as employees' Social Security contributions, withholding taxes, group insurance, union dues, and savings bonds. The total includes salaries of officers of these establishments, if a corporation; it excludes payments to the proprietor or partners, if an unincorporated concern. Respondents were told that in reporting they could follow the definition of payrolls used for calculating the Federal withholding tax.

**Man-Hours of Production Workers**—This total relates to production-worker man-hours worked or paid for at the plant including actual overtime hours (not straight-time equivalent hours). It excludes hours paid for vacation, holidays, or sick leave when the employee was not at the plant.

**Cost of Materials**—The term "Cost of Materials" refers to charges actually paid or payable for items consumed or put into production during the year, including freight and other direct charges incurred by the establishment in acquiring these materials. It includes the cost of materials or fuel consumed regardless of

whether these items were purchased by the establishment from other companies, transferred to it from other establishments of the same company, or withdrawn from inventory during the year. The establishment was requested to value materials transferred from other parts of the company at its approximate market value, not at cost of production. The important components of this cost item are (a) all raw materials, semifinished goods, parts, components, containers, scrap, and supplies put into production or used as operating supplies and for repair and maintenance during the year; (b) electric energy purchased; (c) fuels consumed for heat, power, or the generation of electricity; (d) work done by others on materials or parts furnished by manufacturing establishments (contract work); and (e) products bought and resold in the same condition.

**Value of Shipments**—The value of shipments is the received or receivable net selling value, f.o.b. plant (exclusive of freight and taxes), of all products shipped, both primary and secondary, as well as all miscellaneous receipts such as receipts for contract work performed for others, installation and repair, sales of scrap, and sale of products bought and resold without further processing. Included are all items made by the establishment or for it under contract from materials owned by it whether sold, transferred to other plants of the same company, or shipped on consignment. The net selling value of products made in one plant on a contract basis from materials owned by another was reported by the plant providing the materials.

In the case of multiunit companies, the manufacturer was requested to report the value of products transferred to other establishments of the same company at full economic value; i.e., to include not only the direct costs of production but also a reasonable proportion of "all other costs" (including company overhead) and profit.

**Duplication in Cost of Materials and Value of Products**—The aggregate cost of materials and value-of-shipments figures for industry groups and for all manufacturing industries may include large amounts of duplication since the products of some industries are used as materials by others. With some important exceptions, such as motor vehicles and parts, this duplication is not significant within individual industries but arises from the addition of the totals of related industries in successive stages of the production of a finished manufactured product. Examples are the addition of flour mills to bakeries in the food group and the addition of pulp mills to paper mills in the paper and allied products group of industries. Esti-



mates of this duplication indicate that the value of manufactured products exclusive of such duplication—the value of finished manufactures—approximates two-thirds of the total value of products.

Prior to 1962, the Bureau of the Census did not publish figures for cost of materials or value of shipments if they contained significant duplication. Effective with the 1962 annual survey these figures were shown at all industry levels for the United States to meet the requests for their use in studies in which the presence of an indeterminate amount of duplication is not a limiting factor. However, they are appropriately footnoted. Effective with the 1964 annual survey, these industry group totals are also shown at the State, standard metropolitan statistical area, and large-county level.

Even where there is no significant amount of duplication, value-of-shipments figures are deficient as measures of the relative economic importance of individual manufacturing industries or geographic areas because of the wide variation in ratio of materials, labor, and other processing costs to value of shipments among industries.

**Value Added by Manufacture**—This measure of manufacturing activity is derived by subtracting the cost of materials, supplies, containers, fuel, purchased electricity, and cost of resales contract work from the value of shipments for products manufactured plus resales and receipts for services rendered. The result of this calculation is adjusted by the net change in finished goods and work-in-process inventories between the beginning and end of the year. (In the few industries that report value of production rather than value of shipments, only changes in work-in-process inventories are used to adjust value added. In the shipbuilding and repairing industry, no inventory adjustment is made.)

“Value added” avoids the duplication in the value of shipments figure which results from the use of products of some establishments as materials by others. Value added is considered to be the best value measure available for comparing the relative economic importance of manufacturing among industries and geographic areas.

**Expenditures for Plant and Equipment**—Manufacturing establishments in operation and establishments under construction but not yet in operation, were asked to report their expenditures for (a) permanent additions and major alterations to the manufacturing establishment, and (b) new machinery and equipment used for replacement purposes and additions to plant capacity if they are of the type for which depreciation accounts are ordinarily maintained.

These totals exclude expenditures for new facilities and equipment leased from nonmanufacturing concerns; new facilities owned by the Federal Government but operated under contract by private companies; and plant and equipment furnished to the manufacturer by communities and nonprofit organizations. Expenditures for used plant and equipment (although reported in the census), expenditures for land, and cost of maintenance and repairs charged as current operating expense are also omitted from the figures for new capital expenditures.

**Central Administrative Offices and Auxiliary Units**—In the 1972 census as in previous years, respondents were asked to file separate reports for central administrative offices or auxiliary units which were (1) at different locations from the establishments served or, (2) at the same location as one of these establishments but were not operated as an integral part thereof and served two or more establishments. The functions of employees in central administrative offices include general company policy determination, planning and management (that is, company purchasing, accounting, general engineering, direction of company personnel matters, and legal and patent matters). Auxiliaries are storage facilities, garages, repair shops, purchasing offices, sales promotion offices, and research laboratories serving the plants or central management of the company.

**Standard Metropolitan Statistical Areas**—Standard metropolitan statistical areas (SMSA) are integrated economic and social units with a large volume of daily travel and communication between the central city and outlying parts of the area.<sup>1</sup> Each area (except in New England) consists of one whole county or more. An area may contain not only highly industrialized counties but also adjoining counties which, though primarily residential in character, contribute significantly to the industrial counties' labor force and are socially and economically integrated with the central city. These areas are defined by the Federal Committee on Standard Metropolitan Statistical Areas of the Office of Management and Budget for general-purpose use throughout the Federal Government in presenting economic and social data. In the New England States, similar intergration criteria are applied in defining

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<sup>1</sup> Each standard metropolitan statistical area must include either (1) a city with 50,000 or more inhabitants, or (2) a city having a population of at least 25,000 which (a) with the addition of the population of contiguous places has a population density of at least 1,000 persons per square mile; (b) constitutes, for general economic and social purposes, a single community with a combined population of at least 50,000; and (c) includes a total population of at least 75,000 in the county or counties in which the city and contiguous places are located.

SMSA's on a city and town basis because towns rather than counties are regarded as the significant unit in this region of the country.

The requirement that each SMSA consist of county units (except in New England) sometimes results in the inclusion in an area of considerable amount of territory which would not ordinarily be considered "metropolitan," much less "industrial." It is recognized that metropolitan areas could be more accurately defined in terms of smaller area segments such as minor civil

divisions, but the usefulness of areas so defined would be limited by the fact that many types of economic and social data are available only on a county basis.

Each SMSA is designated by the name of the principal city of the area. In addition to the name of the principal city, the area title may include one or two additional city names.

The data for SMSA's which changed definition since the 1967 census have not been retabulated on the new basis for years prior to 1972.





PRELIMINARY REPORT  
**1972 CENSUS OF  
MANUFACTURES**  
AREA SERIES

C72(P)-S40

Issued April 1974

U. S. DEPARTMENT OF COMMERCE • Social and Economic Statistics Administration • BUREAU OF THE CENSUS

**Rhode Island**

Value added by manufacturing in 1972 in the State of Rhode Island amounted to \$1,782 million, a 21-percent increase from 1971 and a 32-percent increase from 1967.

This report presents preliminary results from the 1972 Census of Manufactures for the State, its Standard Metropolitan Statistical Areas, and its counties.

Data are provided for industry groups within the State. Historical data, back to 1958, are included for the State as a whole,

and 1967 figures on employment and value added are provided for the smaller areas.

The figures in this report have been subjected to only preliminary review and must be regarded as approximations of the final census figures. No adjustments have been made in the value figures for changes in price level.

For an explanation of the terms used in the tables, see the appendix at the end of this report.

**TABLE 1. General Statistics for the State: 1972 and Earlier Years**

(See appendix, Explanation of Terms)

Year	Establishments		All employees <sup>1</sup>		Production workers			Value added by manufacture	Cost of materials <sup>2</sup>	Value of shipments <sup>2</sup>	Capital expenditures, new
	Total	With 20 employees or more	Number	Payroll	Number	Man-hours	Wages				
	(number)	(number)	(1,000)	(million dollars)	(1,000)	(millions)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(million dollars)
RHODE ISLAND											
1972 Census .....	2,738	887	117.8	884.4	91.0	174.9	566.4	1,782.2	1,487.1	3,218.0	103.9
1971 ASM .....	(NA)	(NA)	110.6	757.8	84.5	162.5	486.9	1,468.9	1,248.4	2,715.0	80.0
1970 ASM .....	(NA)	(NA)	118.7	770.9	90.9	176.4	499.0	1,402.4	1,267.1	2,680.3	72.7
1969 ASM .....	(NA)	(NA)	125.1	762.5	99.3	191.2	503.4	1,472.6	1,299.9	2,775.2	80.9
1968 ASM .....	(NA)	(NA)	124.9	746.0	98.2	193.6	488.1	1,443.6	1,288.4	2,717.0	91.0
1967 Census .....	2,703	922	122.3	700.4	96.6	188.5	466.9	1,350.9	1,228.1	2,560.5	74.8
1966 ASM .....	(NA)	(NA)	127.1	682.9	100.4	200.5	464.6	1,354.9	1,254.1	2,580.7	75.0
1965 ASM .....	(NA)	(NA)	121.5	612.2	95.9	191.2	417.0	1,207.4	1,105.0	2,271.0	54.2
1964 ASM .....	(NA)	(NA)	113.7	557.7	89.3	177.8	376.5	1,006.8	988.2	2,002.7	47.2
1963 Census .....	2,710	868	113.9	533.4	90.0	177.2	365.3	958.6	(NA)	(NA)	43.1
1962 ASM .....	(NA)	(NA)	118.9	549.7	92.6	184.7	372.5	969.7	(NA)	(NA)	49.4
1961 ASM .....	(NA)	(NA)	118.2	520.1	91.6	181.3	351.8	923.5	(NA)	(NA)	44.5
1960 ASM .....	(NA)	(NA)	120.0	511.4	95.6	187.7	353.2	904.8	(NA)	(NA)	36.3
1959 ASM .....	(NA)	(NA)	121.6	506.1	98.2	193.7	354.1	904.5	(NA)	(NA)	33.1
1958 Census .....	2,737	907	114.5	453.1	91.4	175.9	314.3	756.2	(NA)	(NA)	29.9

Note: "ASM" data are based on a representative sample of manufacturing establishments canvassed in the Annual Survey of Manufactures. These estimates may differ from the results of a complete canvass of all manufacturing establishments. The standard errors associated with these estimates are published in the annual survey of manufactures volumes for this period. For comparative purposes, the 1972 ASM estimate for the State of Rhode Island was 116 thousand employees, and \$1,723 million in value added with corresponding standard error of estimate of 2 and 3.

(NA) Not available.

<sup>1</sup>Includes employment and payroll at central administrative offices and auxiliary units. (For a definition of these units, see appendix.)

<sup>2</sup>The total cost of materials and value of shipments may include extensive duplication arising from shipments between establishments in the same industry classification. (For a more complete explanation, see appendix.)

TABLE 2. General Statistics for the State, Standard Metropolitan Statistical Areas, and Counties: 1972 and 1967

(See appendix, Explanation of Terms)

State, standard metropolitan statistical areas, and counties <sup>1</sup>	1972											1967	
	Establishments		All employees <sup>2</sup>		Production workers			Value added by manufac- ture	Cost of materials <sup>3</sup>	Value of shipments <sup>3</sup>	Capital expendi- tures, new	All employees	Value added by manufac- ture
	Total	With 20 employees or more	Number	Payroll	Number	Man-hours	Wages						
	(number)	(number)	(1,000)	(million dollars)	(1,000)	(million)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(1,000)	(million dollars)
RHODE ISLAND, TOTAL . . . . .	2 738	887	117.8	884.4	91.0	174.9	566.4	1 782.2	1 487.1	3 218.0	103.9	122.3	1 350.9
STANDARD METROPOLITAN STATISTICAL AREAS <sup>4</sup>													
FALL RIVER . . . . .	325	190	25.2	173.3	20.1	36.5	113.0	354.5	285.1	634.5	19.1	21.3	154.2
PORTION IN MASSACHUSETTS. . . . .	307	186	22.6	144.8	19.6	34.1	102.4	290.8	246.8	534.6	(D)	21.3	153.8
PORTION IN RHODE ISLAND . . . . .	18	4	2.6	28.5	1.5	2.4	10.6	63.7	38.3	99.9	(D)	(2)	.4
NEW LONDON-NORWICH . . . . .	250	108	29.2	276.4	18.7	37.5	144.5	651.8	535.2	1 178.9	48.2	29.9	352.1
PORTION IN RHODE ISLAND . . . . .	34	19	2.3	16.2	1.9	3.4	10.5	26.1	20.2	45.5	1.5	(NA)	(NA)
PORTION IN CONNECTICUT. . . . .	216	89	26.9	260.2	16.8	34.1	134.0	625.7	515.0	1 133.4	46.7	(NA)	(NA)
PROVIDENCE-WARWICK-PAWTUCKET . . . . .	2 460	971	130.9	984.7	101.2	197.3	629.5	2 043.5	1 816.0	3 821.4	114.2	138.0	1 533.2
PORTION IN MASSACHUSETTS. . . . .	216	126	20.3	163.3	15.4	31.7	97.4	286.6	305.1	575.0	10.3	22.7	266.3
PORTION IN RHODE ISLAND . . . . .	2 644	845	110.6	821.4	85.8	165.6	532.1	1 756.9	1 510.9	3 246.4	103.9	115.3	1 267.6
COUNTIES													
BRISTOL. . . . .	78	37	5.5	38.6	4.5	8.5	26.7	77.8	69.7	143.6	10.1	6.4	66.0
KENT . . . . .	308	85	12.8	97.6	9.5	18.2	59.8	185.6	180.2	365.9	21.9	13.0	147.5
NEWPORT. . . . .	42	11	3.4	34.7	2.1	3.6	15.6	80.7	42.6	111.3	(D)	2.7	39.3
PROVIDENCE . . . . .	2 225	713	91.4	665.1	70.5	136.1	434.8	1 339.4	1 136.2	2 413.0	65.3	93.0	1 020.2
WASHINGTON . . . . .	76	33	5.1	42.1	3.9	7.5	26.0	62.9	50.1	112.5	4.9	7.1	78.0

(NA) Not available. (D) Withheld to avoid disclosing figures for individual companies. (2) Less than half of the unit of measurement shown.

<sup>1</sup>Some counties were withheld from publication in order to (a) avoid disclosing figures for individual companies or (b) permit further checking of the figures for smaller counties. Additional detail will appear in the final report for this State.<sup>2</sup>Includes employment and payroll at central administrative offices and auxiliary units. (For a definition of these units, see appendix.)<sup>3</sup>The total cost of materials and value of shipments may include extensive duplication arising from shipments between establishments in the same industry classification. (For a more complete explanation, see appendix.)<sup>4</sup>The standard metropolitan statistical areas in this State are defined as follows:

FALL RIVER, MA-RI, SMSA: Consists of Fall River city, and Dighton, Somerset, Swansea, and Westport towns in Bristol County, MA, and Little Compton, Portsmouth, and Tiverton towns in Newport County, RI.

NEW LONDON-NORWICH, CT-RI, SMSA: Consists of Old Saybrook town in Middlesex County, CT; New London and Norwich cities, and Bozrah, East Lyme, Griswold, Groton, Ledyard, Lisbon, Montville, Old Lyme, Preston, Sprague, Stonington, and Waterford towns in New London County, CT; and Hopkinton and Westerly towns in Washington County, RI.

PROVIDENCE-WARWICK-PAWTUCKET, RI-MA, SMSA: Consists of Barrington, Bristol, and Warren towns in Bristol County, RI; Warwick city, and Coventry, East Greenwich, and West Warwick towns in Kent County, RI; Jamestown town in Newport County, RI; Central Falls, Cranston, East Providence, Pawtucket, Providence, and Woonsocket cities, and Burrillville, Cumberland, Johnston, Lincoln, North Providence, North Smithfield, Scituate, and Smithfield towns in Providence County, RI; and Narragansett, North Kingstown, and South Kingstown towns in Washington County, RI; and Attleboro city, and North Attleborough, Norton, Rehoboth, and Seekonk towns in Bristol County, MA; Plainville town in Norfolk County, MA; and Blackstone and Millville towns in Worcester County, MA.

TABLE 3. General Statistics for the State, by Industry Groups and Industries: 1972 and 1967

(See appendix, Explanation of Terms)

Code	Industry	1972											1967	
		Establishments		All employees		Production workers			Value added by manufacture	Cost of materials <sup>1</sup>	Value of shipments <sup>1</sup>	Capital expenditures, new	All employees	Value added by manufacture
		Total	With 20 employees or more	Number	Payroll	Number	Man-hours	Wages						
		(number)	(number)	(1,000)	(million dollars)	(1,000)	(million)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(1,000)	(million dollars)
	ALL INDUSTRIES, TOTAL. . . . .	2 738	887	117.8	884.4	91.0	174.9	566.4	1 782.2	1 487.1	3 218.0	103.9	122.3	1 350.9
20	FOOD AND KINDRED PRODUCTS. . . . .	165	46	5.2	39.5	3.1	5.8	21.9	84.7	114.7	199.2	4.3	5.3	69.2
202	DAIRY PRODUCTS . . . . .	34	14	1.0	7.0	.3	.6	2.2	18.9	32.5	51.3	.6	1.2	19.7
2026	FLUID MILK . . . . .	23	12	.9	6.0	.2	.5	1.9	17.1	27.9	45.0	.4	1.1	18.4
205	BAKERY PRODUCTS. . . . .	48	10	1.4	13.0	.7	1.3	5.1	22.5	17.7	40.1	1.5	1.6	17.7
208	BEVERAGES. . . . .	24	7	1.1	10.9	.8	1.9	8.0	25.1	28.1	52.9	1.3	1.2	20.3
2086	BOTTLED AND CANNED SOFT DRINKS . . . .	15	3	.3	2.1	.1	.2	.5	5.6	5.3	10.9	.5	.4	5.4
22	TEXTILE MILL PRODUCTS. . . . .	251	146	17.5	115.5	15.0	29.5	86.3	200.3	191.7	392.6	14.8	22.0	188.2
2221	WEAVING MILLS, SYNTHETICS. . . . .	20	14	1.3	10.2	1.2	2.8	8.7	20.1	26.6	47.6	1.5	1.4	14.2
2231	WEAVING AND FINISHING MILLS, WOOL. .	15	10	.7	4.7	.6	1.1	3.6	6.0	6.0	11.9	.3	2.2	17.2
2241	NARROW FABRIC MILLS. . . . .	51	34	4.3	27.2	3.7	7.5	19.8	46.6	46.3	93.4	2.1	5.0	42.6
225	KNITTING MILLS . . . . .	18	10	3.2	20.9	2.7	4.8	15.3	41.7	41.7	82.7	5.5	2.1	20.1
2257	CIRCULAR KNIT FABRIC MILLS . . . . .	10	6	1.9	13.0	1.5	2.7	9.1	22.5	25.8	48.4	4.6	(NA)	(NA)
226	TEXTILE FINISHING, EXCEPT WOOL . .	33	23	2.8	19.6	2.4	4.8	15.3	31.5	25.7	56.5	(D)	3.6	30.7
2262	FINISHING PLANTS, SYNTHETICS . . . .	12	10	1.5	10.9	1.2	2.5	8.2	16.8	15.9	32.3	.7	1.8	17.5
228	YARN AND THREAD MILLS. . . . .	24	15	1.7	10.1	1.5	3.0	7.6	15.2	10.3	25.5	1.7	3.1	25.9
2283	WOOL YARN MILLS. . . . .	7	7	.8	4.8	.7	1.5	3.9	6.0	3.1	8.2	(D)	2.1	17.2
229	MISCELLANEOUS TEXTILE GOODS. . . .	78	33	3.1	20.9	2.5	4.9	14.6	35.7	31.2	66.9	2.1	3.8	32.9
2298	CORDAGE AND TWINE. . . . .	6	4	.3	1.5	.2	.4	1.0	2.8	1.8	4.4	.1	(NA)	(NA)
2299	TEXTILE GOODS, NEC . . . . .	22	13	1.0	6.7	.8	1.6	4.8	10.3	9.0	19.7	(D)	(NA)	(NA)
23	APPAREL, OTHER TEXTILE PRODUCTS. .	67	29	2.7	12.4	2.2	3.7	9.3	21.7	15.5	36.9	.6	3.7	25.1
233	WOMEN'S AND MISSES' OUTERWEAR . .	21	15	1.0	3.9	.7	1.4	3.5	5.0	.2	5.1	.1	1.0	4.8
238	MISC. APPAREL AND ACCESSORIES. . .	10	4	.4	2.4	.3	.6	1.5	5.8	5.0	10.6	.1	.6	3.1
239	MISC. FABRICATED TEXTILE PRODUCTS. .	27	4	.5	2.3	.4	.7	1.7	4.3	4.2	9.1	.4	CC	(D)
24	LUMBER AND WOOD PRODUCTS . . . .	42	4	.4	3.0	.3	.6	2.2	4.9	4.3	9.2	.2	(NA)	(NA)
25	FURNITURE AND FIXTURES . . . . .	30	9	.7	5.6	.6	1.2	4.2	10.7	7.4	18.0	.1	.7	8.6
254	PARTITIONS AND FIXTURES. . . . .	17	6	.5	4.7	.5	1.0	3.7	10.6	5.8	14.8	.1	.4	5.2
2541	WOOD PARTITIONS AND FIXTURES . . . .	12	3	.4	3.9	.4	.7	3.1	9.2	4.8	12.6	.1	.4	5.2

See footnotes at end of table.



TABLE 3. General Statistics for the State, by Industry Groups and Industries: 1972 and 1967—Continued

(See appendix, Explanation of Terms)

Code	Industry	1972											1967	
		Establishments		All employees		Production workers			Value added by manufacture	Cost of materials <sup>1</sup>	Value of shipments <sup>1</sup>	Capital expenditures, new	All employees	Value added by manufacture
		Total	With 20 employees or more	Number	Payroll	Number	Man-hours	Wages						
		(number)	(number)	(1,000)	(million dollars)	(1,000)	(million)	(million dollars)					(1,000)	(million dollars)
26	PAPER AND ALLIED PRODUCTS. . . .	49	30	2.7	19.1	2.3	4.5	13.7	33.8	36.9	71.1	2.3	2.8	24.5
264	MISC. CONVERTED PAPER PRODUCTS. .	24	10	.8	6.5	.6	1.3	4.2	11.8	18.2	30.1	.8	.7	8.5
2541	PAPER COATING AND GLAZING. . . . .	7	3	.3	2.9	.2	.6	1.9	5.6	10.5	16.2	(D)	.3	4.3
2652	SETUP PAPERBOARD BOXES. . . . .	13	10	.7	3.3	.6	1.0	2.5	5.4	3.0	8.5	.1	.7	4.4
27	PRINTING AND PUBLISHING. . . . .	194	38	5.3	52.1	3.7	7.0	32.5	101.1	45.9	148.2	3.7	4.4	53.1
2711	NEWSPAPERS. . . . .	24	9	1.9	20.8	1.1	1.8	10.9	36.2	9.3	45.5	.7	1.8	22.5
275	COMMERCIAL PRINTING. . . . .	128	18	1.8	18.0	1.4	2.8	13.1	32.2	21.3	53.2	2.2	(NA)	(NA)
2752	COMMERCIAL PRINTING, LITHOGRAPHIC. .	41	10	.6	7.0	.5	1.0	4.6	13.8	7.4	20.9	1.6	(NA)	(NA)
28	CHEMICALS AND ALLIED PRODUCTS. .	74	19	2.8	24.5	1.7	3.2	11.5	50.2	58.2	110.5	5.1	3.0	49.2
284	SOAPS, CLEANERS, AND TOILET GOODS.	30	8	1.0	6.8	.8	1.4	3.8	19.0	20.8	38.7	.7	(NA)	(NA)
30	RUBBER AND MISC. PLASTICS PROD. .	90	39	5.9	42.0	4.6	9.9	28.0	134.2	71.2	193.3	8.4	(NA)	(NA)
3079	MISCELLANEOUS PLASTICS PRODUCTS. .	72	36	3.9	28.1	2.9	5.7	17.1	110.8	54.7	153.7	7.8	(NA)	(NA)
31	LEATHER AND LEATHER PRODUCTS. .	24	14	1.9	10.9	1.6	2.7	6.8	28.0	22.3	49.3	.7	1.5	15.9
32	STONE, CLAY, AND GLASS PRODUCTS.	52	15	2.2	20.9	1.8	3.8	15.5	44.8	24.5	68.1	1.5	2.5	32.3
327	CONCRETE, GYPSUM, PLASTER PRODUCTS	26	6	.4	4.2	.3	.6	2.5	9.2	7.4	16.7	.5	.4	7.6
33	PRIMARY METAL INDUSTRIES. . . . .	103	44	9.8	83.1	7.8	16.0	60.5	181.8	293.0	475.6	17.6	9.7	162.0
331	BLAST FURNACE, BASIC STEEL PROD. .	7	4	1.8	17.0	1.5	3.1	12.2	34.8	22.1	55.7	1.7	EE	(D)
332	IRON AND STEEL FOUNDRIES. . . . .	8	6	.8	7.1	.7	1.3	5.1	10.5	5.5	16.4	(D)	.5	4.0
335	NONFERROUS ROLLING AND DRAWING. .	23	19	6.4	53.4	5.0	10.4	39.4	119.9	232.6	354.1	10.6	6.8	117.5
3357	NONFERROUS WIRE DRAWING, INSULATING.	14	14	5.7	47.9	4.5	9.5	35.6	110.2	217.6	329.2	10.4	6.0	103.6
336	NONFERROUS FOUNDRIES. . . . .	33	7	.4	2.2	.3	.5	1.7	4.9	5.4	9.2	.2	AA	(D)
34	FABRICATED METAL PRODUCTS. . . . .	361	105	8.5	62.2	6.6	13.0	42.0	108.6	76.8	183.2	6.2	(NA)	(NA)
344	FABRICATED STRUCTURAL METAL PROD. .	53	18	1.2	10.3	.9	1.7	6.5	20.5	19.3	39.4	2.8	.9	10.0
3441	FABRICATED STRUCTURAL METAL PRODUCTS	9	6	.3	2.8	.2	.4	1.7	5.4	3.8	9.1	(D)	.2	1.1
345	SCREW MACHINE PRODUCTS, BOLTS, ETC	54	16	1.3	10.7	1.1	2.2	7.6	18.9	13.7	32.2	.7	1.5	15.5
346	METAL FORGINGS AND STAMPINGS. . .	38	16	1.2	8.9	.9	1.8	5.3	14.9	13.3	28.2	.5	(NA)	(NA)
347	METAL SERVICES, NEC. . . . .	152	36	2.4	14.1	2.1	3.8	10.8	23.6	11.6	35.1	1.3	1.9	14.8
349	MISC. FABRICATED METAL PRODUCTS. .	50	16	1.5	10.9	.9	1.8	6.2	18.3	12.0	29.0	.7	(NA)	(NA)
3499	FABRICATED METAL PRODUCTS, NEC. . .	27	6	.7	4.9	.4	.8	3.0	7.8	4.6	12.8	.2	(NA)	(NA)
35	MACHINERY, EXCEPT ELECTRICAL. .	262	48	8.8	83.0	5.7	11.5	46.1	132.0	75.4	206.9	5.4	10.9	138.6
354	METALWORKING MACHINERY. . . . .	94	21	3.7	35.6	2.6	5.2	21.3	55.2	23.1	79.2	2.0	5.3	62.3
3544	SPECIAL DIES, TOOLS, JIGS, FIXTURES.	55	6	.7	5.0	.6	1.3	3.9	9.1	2.4	11.1	(D)	.4	3.9
3545	MACHINE TOOL ACCESSORIES. . . . .	23	8	1.1	10.2	.7	1.3	5.9	19.4	5.2	24.4	.5	EE	(D)
355	SPECIAL INDUSTRY MACHINERY. . . . .	32	12	3.3	31.1	1.9	3.8	15.5	51.0	30.1	81.1	2.6	3.5	51.1
3552	TEXTILE MACHINERY. . . . .	20	8	2.2	20.8	1.2	2.5	9.7	38.9	19.4	58.5	2.1	2.8	43.9
356	GENERAL INDUSTRIAL MACHINERY. . .	16	7	.8	8.2	.5	1.0	4.0	12.6	16.2	27.6	.3	.7	10.6
359	MISC. MACHINERY, EXCEPT ELECTRICAL	106	6	.8	7.1	.6	1.3	4.7	11.4	5.0	16.1	.4	(NA)	(NA)
3599	MACHINERY, EXCEPT ELECTRICAL, NEC. .	106	6	.8	7.1	.6	1.3	4.7	11.4	5.0	16.1	.4	(NA)	(NA)
36	ELECTRIC, ELECTRONIC EQUIPMENT. .	59	30	8.3	63.5	5.9	10.4	32.8	122.8	87.3	209.7	12.3	(NA)	(NA)
364	ELECT. LIGHTING AND WIRING EQUIP. .	10	7	3.1	20.7	2.7	5.0	15.4	40.3	37.5	78.6	(D)	FF	(D)
369	MISC. ELECTRICAL EQUIP., SUPPLIES.	11	6	1.2	8.2	.9	1.7	5.3	18.0	14.1	31.6	0.6	EE	(D)
37	TRANSPORTATION EQUIPMENT. . . . .	35	16	1.6	10.9	1.3	2.6	8.9	22.6	20.2	42.1	2.1	(NA)	(NA)
373	SHIP, BOAT BUILDING, REPAIRING. . .	22	7	.8	5.9	.7	1.4	5.0	10.7	10.5	20.7	1.8	.6	4.4
3732	BOAT BUILDING AND REPAIRING. . . . .	19	6	.7	4.7	.6	1.1	4.0	8.2	9.1	17.0	1.7	CC	(D)
38	INSTRUMENTS AND RELATED PRODUCTS	14	17	5.3	37.6	4.4	8.3	26.8	70.5	37.7	105.3	1.7	(NA)	(NA)
3851	OPHTHALMIC GOODS. . . . .	10	5	1.3	8.8	1.1	2.2	6.0	18.4	12.2	28.6	.9	CC	(D)
39	MISC. MANUFACTURING INDUSTRIES. .	808	223	16.8	176.8	22.1	40.8	115.1	397.7	293.8	679.4	15.9	24.2	240.4
3911	JEWELRY, PRECIOUS METAL. . . . .	192	55	6.2	42.3	5.0	8.9	26.0	95.0	71.5	163.1	1.6	5.7	65.9
394	TOYS AND SPORTING GOODS. . . . .	21	10	3.5	24.4	3.1	5.7	18.0	60.7	49.0	107.0	6.8	EE	(D)
396	COSTUME JEWELRY AND NOTIONS. . . .	282	99	0.4	62.6	8.7	16.2	40.0	200.3	140.7	340.2	-	9.2	74.7
3961	COSTUME JEWELRY. . . . .	267	89	8.9	51.6	7.6	14.1	34.6	117.4	85.0	201.7	2.4	8.1	65.2
399	MISCELLANEOUS MANUFACTURES. . . .	124	16	1.4	7.6	1.1	1.9	5.1	15.5	9.6	24.8	.6	1.3	10.3
3993	SIGNS AND ADVERTISING DISPLAYS. . .	33	11	.7	4.0	.5	.9	2.6	8.0	4.1	12.0	.2	.5	4.9
3999	MANUFACTURING INDUSTRIES, NEC. . .	88	5	.7	3.3	.5	.9	2.3	7.0	4.9	11.7	(D)	.7	5.0
--	ADMINISTRATIVE AND AUXILIARY. . .	30	11	1.2	17.1	-	-	-	-	-	-	-	1.1	-

Note: The following symbols indicate employment size range for 1967:

AA less than 250 employees      EE 1,000 to 2,499 employees  
 BB 250 to 499 employees      FF 2,500 employees and over  
 CC 500 to 999 employees

- Represents zero. (NA) Not available. Because of a revision to this industry or industry group in the 1972 edition of the SIC manual, 1967 census data are not available on a comparable basis. (D) Withheld to avoid disclosing figures for individual companies

<sup>1</sup>The total cost of materials and value of shipments for industry groups shown may include extensive duplication arising from shipments between establishments in the same industry classification. (For a more complete explanation, see appendix.)

<sup>2</sup>Includes figures for industry groups which have been withheld from publication in order to (a) avoid disclosing figures for individual companies or (b) permit further checking of figures for smaller industry groups. Additional detail will appear in the final report for this State.

## Appendix A. SCOPE AND COVERAGE

This report is one of a series presenting preliminary information, by State, from the 1972 Census of Manufactures. The data will be superseded in a final report which, in turn, will be included in *Volume III, Area Statistics, 1972 Census of Manufactures*. The final report will include a comprehensive discussion of the concepts and definitions used in the census.

The census of manufactures covers each manufacturing establishment in the United States with one paid employee or more; manufacturing establishments with no employees are excluded. Firms which operated more than one establishment were required to file a separate report for each location. Companies which engaged in distinctly different lines of activity at one location were asked to submit separate reports if the company records permitted such a separation and the activities were of significant size.

This report includes figures for administrative offices, warehouses, garages, or other auxiliary units which service manufacturing establishments.

In the 1972 census, the approximately 120,000 manufacturing establishments with fewer than 10 employees were excused from filing reports. Under special arrangements which safeguarded the confidentiality of both tax and census records, data on payrolls, sales, and industry classification from the administrative records of the Social Security Administration and the Internal Revenue Service were made available to the Census Bureau for use in the 1972 Economic Censuses (retail and wholesale trade, service industries, construction industries, manufactures, and mineral industries). Estimates for data other than payrolls and sales for these small establishments were constructed from industry averages. The effect on industry aggregates is slight in most industries. For manufacturing as a whole, these small establishments account for less than 3 percent of the payrolls and value added.

Establishments are classified by industry in accordance with industry definitions described in the 1972 edition of the Standard Industrial Classification (SIC) Manual. For 1972, the SIC was significantly revised and the comparability with prior year's data for some industries was significantly affected. The comparability at the 2- and 3-digit SIC levels was less affected. The final volumes of the 1972 Census of Manufactures will contain a table relating aggregates based on the 1972 SIC with aggregates derived from classifying establishments according to the 1967 SIC definitions.

As in earlier censuses, a number of small establishments may have been misclassified as to industry. However, such possible misclassifications have significant effect on *none* of the statistics except the number of establishments. As indicated above, report forms were not mailed to very small establishments (fewer than 10 employees). The industry classifications for these establishments were assigned on the basis of brief descriptions of the general activity of the establishment. Where the description is incomplete or there are relatively fine lines of demarcation among industries or between manufacturing and nonmanufacturing activity, the code assigned to an establishment could differ from that which would have been assigned on the basis of more complete product information. Therefore, the total establishment count for individual industries should be viewed as an approximation rather than a precise measurement. The counts for establishments with 20 employees or more are more reliable than the total number of establishments.

More detailed figures for this State will appear in the final census reports. Final reports will also include a comprehensive discussion of such concepts as "industry" and "establishment," as well as the various statistical items such as "employment," "value of shipments," and "value added." Similar preliminary and final reports will be issued for other States during the coming months. A series of preliminary summary reports showing U.S. totals for each manufacturing industry and for each State are being issued. Final industry reports and final area reports will be published during 1974.

Order forms describing the individual reports and listing their prices may be obtained from any U.S. Department of Commerce district office or from the Publications Distribution Section, Social and Economic Statistics Administration, Washington, D.C. 20233.

The 1972 Census of Manufactures is the 29th census of manufacturing establishments in the United States. For 1972, it was conducted jointly with the censuses of mineral industries, construction industries, retail trade, wholesale trade, and selected services under authority of Title 13 of the United States Code. Title 13 specifies that a census of manufactures be conducted every 5 years and, as amended, to cover years ending in "2" and "7". Title 13 also authorizes an annual sample survey of manufacturing establishments in interim years.



## Appendix B. EXPLANATION OF TERMS

*(For a more complete discussion of these terms and the method of compiling the Census of Manufactures, see the "Introduction" to the 1967 Census of Manufactures, Volume III).*

**All Employees**—All full-time and part-time employees on the payrolls of operating manufacturing establishments for any part of the pay period ending nearest the 12th of the months specified on the report form. Included are all persons on paid sick leave, paid holidays, and paid vacations during these pay periods. Officers of corporations are included as employees; proprietors and partners of unincorporated firms are excluded. The "all employee" number is the average number of production workers for the midmonth payroll period of March, May, August, and November plus the number of nonproduction employees in mid-March.

**Number of Production Workers**—Workers (up through the working foreman level) engaged in fabricating, processing, assembling, inspecting, receiving, packing, warehousing, shipping (but not delivering), and maintenance, repair, janitorial, and watchman services, product development, auxiliary production for plant's own use (e.g., powerplant), recordkeeping, and other closely associated services. Proprietors and partners are excluded.

**Payroll**—This item includes all forms of compensation such as salaries, wages, commissions, dismissal pay, bonuses, vacation and sick leave pay, and compensation in kind, prior to such deductions as employees' Social Security contributions, withholding taxes, group insurance, union dues, and savings bonds. The total includes salaries of officers of these establishments, if a corporation; it excludes payments to the proprietor or partners, if an unincorporated concern. Respondents were told that in reporting they could follow the definition of payrolls used for calculating the Federal withholding tax.

**Man-Hours of Production Workers**—This total relates to production-worker man-hours worked or paid for at the plant including actual overtime hours (not straight-time equivalent hours). It excludes hours paid for vacation, holidays, or sick leave when the employee was not at the plant.

**Cost of Materials**—The term "Cost of Materials" refers to charges actually paid or payable for items consumed or put into production during the year, including freight and other direct charges incurred by the establishment in acquiring these materials. It includes the cost of materials or fuel consumed regardless of

whether these items were purchased by the establishment from other companies, transferred to it from other establishments of the same company, or withdrawn from inventory during the year. The establishment was requested to value materials transferred from other parts of the company at its approximate market value, not at cost of production. The important components of this cost item are (a) all raw materials, semifinished goods, parts, components, containers, scrap, and supplies put into production or used as operating supplies and for repair and maintenance during the year; (b) electric energy purchased; (c) fuels consumed for heat, power, or the generation of electricity; (d) work done by others on materials or parts furnished by manufacturing establishments (contract work); and (e) products bought and resold in the same condition.

**Value of Shipments**—The value of shipments is the received or receivable net selling value, f.o.b. plant (exclusive of freight and taxes), of all products shipped, both primary and secondary, as well as all miscellaneous receipts such as receipts for contract work performed for others, installation and repair, sales of scrap, and sale of products bought and resold without further processing. Included are all items made by the establishment or for it under contract from materials owned by it whether sold, transferred to other plants of the same company, or shipped on consignment. The net selling value of products made in one plant on a contract basis from materials owned by another was reported by the plant providing the materials.

In the case of multiunit companies, the manufacturer was requested to report the value of products transferred to other establishments of the same company at full economic value; i.e., to include not only the direct costs of production but also a reasonable proportion of "all other costs" (including company overhead) and profit.

**Duplication in Cost of Materials and Value of Products**—The aggregate cost of materials and value-of-shipments figures for industry groups and for all manufacturing industries may include large amounts of duplication since the products of some industries are used as materials by others. With some important exceptions, such as motor vehicles and parts, this duplication is not significant within individual industries but arises from the addition of the totals of related industries in successive stages of the production of a finished manufactured product. Examples are the addition of flour mills to bakeries in the food group and the addition of pulp mills to paper mills in the paper and allied products group of industries. Esti-



mates of this duplication indicate that the value of manufactured products exclusive of such duplication—the value of finished manufactures—approximates two-thirds of the total value of products.

Prior to 1962, the Bureau of the Census did not publish figures for cost of materials or value of shipments if they contained significant duplication. Effective with the 1962 annual survey these figures were shown at all industry levels for the United States to meet the requests for their use in studies in which the presence of an indeterminate amount of duplication is not a limiting factor. However, they are appropriately footnoted. Effective with the 1964 annual survey, these industry group totals are also shown at the State, standard metropolitan statistical area, and large-county level.

Even where there is no significant amount of duplication, value-of-shipments figures are deficient as measures of the relative economic importance of individual manufacturing industries or geographic areas because of the wide variation in ratio of materials, labor, and other processing costs to value of shipments among industries.

**Value Added by Manufacture**—This measure of manufacturing activity is derived by subtracting the cost of materials, supplies, containers, fuel, purchased electricity, and cost of resales contract work from the value of shipments for products manufactured plus resales and receipts for services rendered. The result of this calculation is adjusted by the net change in finished goods and work-in-process inventories between the beginning and end of the year. (In the few industries that report value of production rather than value of shipments, only changes in work-in-process inventories are used to adjust value added. In the shipbuilding and repairing industry, no inventory adjustment is made.)

“Value added” avoids the duplication in the value of shipments figure which results from the use of products of some establishments as materials by others. Value added is considered to be the best value measure available for comparing the relative economic importance of manufacturing among industries and geographic areas.

**Expenditures for Plant and Equipment**—Manufacturing establishments in operation and establishments under construction but not yet in operation, were asked to report their expenditures for (a) permanent additions and major alterations to the manufacturing establishment, and (b) new machinery and equipment used for replacement purposes and additions to plant capacity if they are of the type for which depreciation accounts are ordinarily maintained.

These totals exclude expenditures for new facilities and equipment leased from nonmanufacturing concerns; new facilities owned by the Federal Government but operated under contract by private companies; and plant and equipment furnished to the manufacturer by communities and nonprofit organizations. Expenditures for used plant and equipment (although reported in the census), expenditures for land, and cost of maintenance and repairs charged as current operating expense are also omitted from the figures for new capital expenditures.

**Central Administrative Offices and Auxiliary Units**—In the 1972 census as in previous years, respondents were asked to file separate reports for central administrative offices or auxiliary units which were (1) at different locations from the establishments served or, (2) at the same location as one of these establishments but were not operated as an integral part thereof and served two or more establishments. The functions of employees in central administrative offices include general company policy determination, planning and management (that is, company purchasing, accounting, general engineering, direction of company personnel matters, and legal and patent matters). Auxiliaries are storage facilities, garages, repair shops, purchasing offices, sales promotion offices, and research laboratories serving the plants or central management of the company.

**Standard Metropolitan Statistical Areas**—Standard metropolitan statistical areas (SMSA) are integrated economic and social units with a large volume of daily travel and communication between the central city and outlying parts of the area.<sup>1</sup> Each area (except in New England) consists of one whole county or more. An area may contain not only highly industrialized counties but also adjoining counties which, though primarily residential in character, contribute significantly to the industrial counties' labor force and are socially and economically integrated with the central city. These areas are defined by the Federal Committee on Standard Metropolitan Statistical Areas of the Office of Management and Budget for general-purpose use throughout the Federal Government in presenting economic and social data. In the New England States, similar intergration criteria are applied in defining

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<sup>1</sup> Each standard metropolitan statistical area must include either (1) a city with 50,000 or more inhabitants, or (2) a city having a population of at least 25,000 which (a) with the addition of the population of contiguous places has a population density of at least 1,000 persons per square mile; (b) constitutes, for general economic and social purposes, a single community with a combined population of at least 50,000; and (c) includes a total population of at least 75,000 in the county or counties in which the city and contiguous places are located.



SMSA's on a city and town basis because towns rather than counties are regarded as the significant unit in this region of the country.

The requirement that each SMSA consist of county units (except in New England) sometimes results in the inclusion in an area of considerable amount of territory which would not ordinarily be considered "metropolitan," much less "industrial." It is recognized that metropolitan areas could be more accurately defined in terms of smaller area segments such as minor civil

divisions, but the usefulness of areas so defined would be limited by the fact that many types of economic and social data are available only on a county basis.

Each SMSA is designated by the name of the principal city of the area. In addition to the name of the principal city, the area title may include one or two additional city names.

The data for SMSA's which changed definition since the 1967 census have not been retabulated on the new basis for years prior to 1972.

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# 1972 CENSUS OF MANUFACTURES

## AREA SERIES

C72(P)-S41

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U. S. DEPARTMENT OF COMMERCE • Social and Economic Statistics Administration • BUREAU OF THE CENSUS

### South Carolina

Value added by manufacturing in 1972 in the State of South Carolina amounted to \$4,921 million, a 16-percent increase from 1971 and a 62-percent increase from 1967.

This report presents preliminary results from the 1972 Census of Manufactures for the State, its Standard Metropolitan Statistical Areas, and its counties.

Data are provided for industry groups within the State. Historical data, back to 1958, are included for the State as a whole,

and 1967 figures on employment and value added are provided for the smaller areas.

The figures in this report have been subjected to only preliminary review and must be regarded as approximations of the final census figures. No adjustments have been made in the value figures for changes in price level.

For an explanation of the terms used in the tables, see the appendix at the end of this report.

TABLE 1. General Statistics for the State: 1972 and Earlier Years

(See appendix, Explanation of Terms)

Year	Establishments		All employees <sup>1</sup>		Production workers			Value added by manufacture	Cost of materials <sup>2</sup>	Value of shipments <sup>2</sup>	Capital expenditures, new
	Total	With 20 employees or more	Number	Payroll	Number	Man-hours	Wages				
	(number)	(number)	(1,000)	(million dollars)	(1,000)	(millions)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(million dollars)
SOUTH CAROLINA											
1972 Census .....	3,691	1,427	344.7	2,327.0	281.7	579.9	1,666.0	4,921.0	5,737.3	10,657.8	489.2
1971 ASM .....	(NA)	(NA)	324.4	2,026.6	264.5	535.5	1,448.7	4,234.5	4,801.3	9,011.3	499.3
1970 ASM .....	(NA)	(NA)	323.8	1,924.0	262.6	534.9	1,366.9	3,767.7	4,288.2	8,029.4	370.5
1969 ASM .....	(NA)	(NA)	338.1	1,891.5	278.0	570.5	1,377.4	3,672.1	4,236.6	7,847.3	358.9
1968 ASM .....	(NA)	(NA)	319.7	1,698.0	265.7	553.5	1,255.6	3,394.0	3,852.9	7,150.9	401.0
1967 Census .....	3,465	1,251	304.3	1,502.2	253.8	523.0	1,106.6	3,030.3	3,448.5	8,440.7	416.6
1966 ASM .....	(NA)	(NA)	297.7	1,408.7	248.8	529.4	1,053.8	2,979.6	3,474.9	6,385.8	400.2
1965 ASM .....	(NA)	(NA)	283.7	1,277.8	237.0	504.2	960.3	2,777.6	3,103.8	5,804.5	282.9
1964 ASM .....	(NA)	(NA)	270.0	1,150.4	227.9	477.6	869.8	2,387.1	2,859.7	5,232.9	228.0
1963 Census .....	3,057	1,076	261.6	1,049.3	221.9	455.3	797.2	2,111.1	(NA)	(NA)	179.8
1962 ASM .....	(NA)	(NA)	253.0	973.8	215.2	442.6	743.5	1,976.8	(NA)	(NA)	165.1
1961 ASM .....	(NA)	(NA)	240.8	890.6	204.9	417.9	677.2	1,744.9	(NA)	(NA)	159.0
1960 ASM .....	(NA)	(NA)	241.0	858.3	206.2	420.3	662.0	1,719.3	(NA)	(NA)	144.3
1959 ASM .....	(NA)	(NA)	236.5	815.4	203.7	417.7	634.1	1,600.4	(NA)	(NA)	95.8
1958 Census .....	2,911	939	225.5	732.1	193.9	381.5	565.0	1,360.1	(NA)	(NA)	75.6

Note: "ASM" data are based on a representative sample of manufacturing establishments canvassed in the Annual Survey of Manufactures. These estimates may differ from the results of a complete canvass of all manufacturing establishments. The standard errors associated with these estimates are published in the annual survey of manufactures volumes for this period. For comparative purposes, the 1972 ASM estimate for the State of South Carolina was 334 thousand employees, and \$4,860 million in value added with corresponding standard error of estimate of 1 and 1.

(NA) Not available.

<sup>1</sup>Includes employment and payroll at central administrative offices and auxiliary units. (For a definition of these units, see appendix.)

<sup>2</sup>The total cost of materials and value of shipments may include extensive duplication arising from shipments between establishments in the same industry classification. (For a more complete explanation, see appendix.)

TABLE 2. General Statistics for the State, Standard Metropolitan Statistical Areas, and Counties: 1972 and 1967

(See appendix, Explanation of Terms)

State, standard metropolitan statistical areas, and counties <sup>1</sup>	1972											1967	
	Establishments		All employees <sup>2</sup>		Production workers			Value added by manufacture	Cost of materials <sup>3</sup>	Value of shipments <sup>3</sup>	Capital expenditures, new	All employees	Value added by manufacture
	Total (number)	With 20 employees or more (number)	Number (1,000)	Payroll (million dollars)	Number (1,000)	Man-hours (million)	Wages (million dollars)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(1,000)	(million dollars)
SOUTH CAROLINA, TOTAL . . . . .	3 691	1 427	344.7	2 327.0	281.7	579.9	1 666.0	4 921.0	5 737.3	10 657.8	489.2	304.3	3 030.3
STANDARD METROPOLITAN STATISTICAL AREAS <sup>4</sup>													
AUGUSTA . . . . .	249	115	30.4	251.6	22.4	45.8	154.8	586.3	492.6	1 079.5	19.4	29.8	442.3
PORTION IN SOUTH CAROLINA . . . . .	75	37	16.4	148.4	12.0	24.6	90.2	325.5	177.4	505.2	4.1	16.1	257.3
PORTION IN GEORGIA . . . . .	174	78	14.0	103.1	10.4	21.2	64.6	260.8	315.2	574.3	15.2	13.7	185.0
CHARLESTON . . . . .	282	95	15.2	112.5	11.5	23.5	72.9	266.6	260.9	516.6	32.7	13.5	160.5
COLUMBIA . . . . .	360	128	21.5	154.4	16.6	33.1	99.6	312.1	367.9	675.8	(D)	18.1	172.1
GREENVILLE-SPARTANBURG . . . . .	819	385	95.2	645.1	74.8	155.6	434.5	1 307.2	1 488.2	2 832.3	190.5	85.9	790.8
COUNTIES													
ABBEVILLE . . . . .	28	16	5.8	36.5	5.3	11.4	31.0	75.3	115.2	190.1	6.4	4.0	33.4
AIKEN . . . . .	75	37	16.4	148.4	12.0	24.6	90.2	325.5	177.4	505.2	4.1	16.1	257.3
ALLENDALE . . . . .	16	6	1.0	5.5	.9	1.8	4.3	8.8	9.4	18.3	.3	.7	3.6
ANDERSON . . . . .	144	78	24.1	157.6	21.0	44.5	127.2	330.0	410.3	706.2	21.2	19.1	154.5
BAMBERG . . . . .	30	13	1.7	7.9	1.4	2.7	6.3	23.6	28.0	50.0	.6	1.1	14.7
BARNWELL . . . . .	21	9	2.2	13.4	2.0	4.2	10.6	24.5	46.5	70.5	2.6	(D)	(D)
BEAUFORT . . . . .	31	10	1.0	5.1	.8	1.4	3.3	6.7	5.5	12.1	.7	.6	2.5
BERKELEY . . . . .	52	15	3.0	19.9	2.6	5.4	15.2	57.7	40.0	92.9	6.8	1.3	8.3
CHARLESTON . . . . .	175	59	9.9	79.9	6.9	14.4	48.5	176.7	194.4	365.5	21.6	11.0	138.9
CHEROKEE . . . . .	52	33	6.8	45.2	6.1	13.2	35.5	82.4	125.2	205.2	12.9	5.5	56.9
CHESTER . . . . .	61	24	6.8	43.5	5.9	12.5	35.8	109.5	165.9	270.1	2.9	6.0	54.3
CHESTERFIELD . . . . .	74	35	5.7	32.5	4.9	10.1	25.3	59.6	104.9	162.7	8.7	3.6	28.7
CLARENDON . . . . .	39	12	1.4	6.8	1.2	2.3	5.7	21.6	14.0	35.2	.4	1.4	8.9
COLLETON . . . . .	35	9	2.0	11.6	1.8	3.6	9.3	20.9	20.6	40.8	.9	2.1	12.2
DARLINGTON . . . . .	88	24	8.5	68.1	6.6	13.8	46.0	138.9	197.9	331.5	9.7	6.8	71.1
DILLON . . . . .	34	16	2.7	14.8	2.2	4.8	11.5	34.6	57.9	94.2	1.4	2.0	19.5
DORCHESTER . . . . .	55	21	2.3	12.7	2.0	3.7	9.2	32.2	26.5	58.2	4.3	1.2	13.3
EDGEFIELD . . . . .	40	12	1.7	9.8	1.4	2.9	7.1	24.6	42.8	67.0	10.6	1.6	14.7
FAIRFIELD . . . . .	124	12	2.3	12.8	2.0	4.0	9.6	18.3	50.2	68.9	.9	2.4	14.3
FLORENCE . . . . .	110	52	11.3	72.4	9.1	17.7	51.0	174.3	143.0	312.1	15.4	7.7	92.0
GEORGETOWN . . . . .	83	18	4.7	36.3	4.1	8.0	28.1	80.3	107.2	186.4	9.4	3.3	53.9
GREENVILLE . . . . .	453	204	44.5	313.8	34.7	72.4	210.7	707.9	771.4	1 477.8	63.8	41.4	403.3
GREENWOOD . . . . .	89	41	12.2	84.5	10.0	21.1	62.6	211.6	196.5	409.5	6.3	14.3	167.0
HAMPTON . . . . .	38	10	1.9	14.8	1.5	3.4	10.4	39.1	62.0	100.5	2.2	1.9	21.6
HORRY . . . . .	95	23	4.1	19.7	3.6	7.0	15.4	39.7	40.9	80.3	2.7	2.4	13.6
KERSHAW . . . . .	96	15	6.5	54.7	5.1	10.2	35.8	180.2	138.3	323.6	23.0	6.0	95.2
LAURENS . . . . .	68	35	10.1	68.3	9.0	18.6	55.5	152.0	132.3	282.9	5.0	8.8	83.5
LEXINGTON . . . . .	160	61	10.2	72.4	8.1	16.2	49.3	161.6	192.6	348.4	17.6	7.5	76.6
MC CORMICK . . . . .	42	3	.8	5.2	.7	1.6	4.2	10.8	26.4	36.8	.8	(D)	(D)
MARION . . . . .	35	18	4.6	22.6	4.1	8.4	18.2	61.1	63.0	120.9	14.1	3.0	21.9
MARLBORO . . . . .	33	18	4.7	27.2	4.1	8.3	21.0	50.6	89.3	143.9	7.3	4.6	36.3
NEWBERRY . . . . .	78	19	4.1	26.2	3.8	8.2	23.0	42.1	53.8	97.4	4.7	3.7	30.2
OCONEE . . . . .	67	21	6.9	40.1	5.9	12.0	32.0	75.1	85.0	170.1	3.8	9.0	80.0
ORANGEBURG . . . . .	94	38	7.0	44.1	5.7	10.9	29.6	116.9	112.9	223.8	17.0	6.6	58.3
PICKENS . . . . .	94	39	12.6	81.1	10.4	21.3	59.5	128.9	135.3	279.3	19.9	11.4	103.9
RICHLAND . . . . .	200	67	11.3	82.0	8.5	16.9	50.3	150.5	175.3	327.4	(D)	10.6	95.5
SALUDA . . . . .	25	9	1.0	5.0	.9	1.8	4.1	9.4	16.3	26.6	.3	1.5	6.8
SPARTANBURG . . . . .	272	142	38.1	250.2	29.7	61.9	164.3	470.4	581.5	1 075.2	106.8	33.1	283.6
SUMTER . . . . .	81	40	7.5	43.6	6.3	12.8	32.8	85.5	106.7	191.5	4.5	6.9	47.4
UNION . . . . .	44	19	6.9	42.8	6.2	12.9	35.4	84.4	108.9	190.5	11.1	6.2	56.4
WILLIAMSBURG . . . . .	33	9	1.7	9.3	1.3	2.6	7.5	26.2	10.9	39.0	1.1	1.4	25.5
YORK . . . . .	112	49	14.6	104.2	12.1	24.3	77.1	168.6	221.5	415.0	17.5	15.0	169.5

(D) Withheld to avoid disclosing figures for individual companies.

<sup>1</sup>Some counties were withheld from publication in order to (a) avoid disclosing figures for individual companies or (b) permit further checking of the figures for smaller counties. Additional detail will appear in the final report for this State.<sup>2</sup>Includes employment and payroll at central administrative offices and auxiliary units. (For a definition of these units, see appendix.)<sup>3</sup>The total cost of materials and value of shipments may include extensive duplication arising from shipments between establishments in the same industry classification. (For a more complete explanation, see appendix.)<sup>4</sup>The standard metropolitan statistical areas in this State are defined as follows:

AUGUSTA, GA-SC, SMSA: Consists of Columbia and Richmond Counties, GA, and Aiken County, SC.

CHARLESTON SMSA: Consists of Berkeley, Charleston, and Dorchester Counties, SC.

COLUMBIA SMSA: Consists of Lexington and Richland Counties, SC.

GREENVILLE-SPARTANBURG, SMSA: Consists of Greenville, Pickens, and Spartanburg Counties, SC.



TABLE 3. General Statistics for the State, by Industry Groups and Industries: 1972 and 1967

(See appendix, Explanation of Terms)

Code	Industry	1972											1967	
		Establishments		All employees		Production workers			Value added by manufacture	Cost of materials <sup>1</sup>	Value of shipments <sup>1</sup>	Capital expenditures, new	All employees	Value added by manufacture
		Total	With 20 employees or more	Number	Payroll	Number	Man-hours	Wages						
		(number)	(number)	(1,000)	(million dollars)	(1,000)	(million)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(1,000)	(million dollars)	
	ALL INDUSTRIES, TOTAL <sup>2</sup> . . . . .	3 691	1 427	344.7	2 327.0	281.7	579.9	1 666.0	4 921.0	5 737.3	10 657.8	489.2	304.3	3 030.3
20	FOOD AND KINDRED PRODUCTS. . . . .	254	109	12.1	75.5	7.8	16.0	41.3	176.7	424.9	598.7	11.2	11.5	120.0
201	MEAT PRODUCTS. . . . .	43	17	2.1	12.4	1.7	3.6	9.0	25.5	108.3	132.2	1.3	3.8	36.3
2011	MEATPACKING PLANTS. . . . .	29	11	1.2	8.3	.9	2.1	5.7	16.5	77.5	93.1	1.1	1.4	22.5
2016	POULTRY DRESSING PLANTS. . . . .	7	5	.7	3.2	.6	1.2	2.6	6.7	24.7	30.5	.2	(NA)	(NA)
202	DAIRY PRODUCTS. . . . .	27	17	1.6	11.5	.7	1.4	4.0	37.1	86.4	123.0	1.4	1.6	24.3
203	PRESERVED FRUITS AND VEGETABLES. . . . .	16	8	2.1	12.7	1.9	3.7	10.1	18.9	50.9	69.8	1.5	(NA)	(NA)
204	GRAIN MILL PRODUCTS. . . . .	31	9	.5	3.1	.3	.7	1.7	9.3	28.6	37.9	.5	.5	5.8
205	BAKERY PRODUCTS. . . . .	15	10	1.6	11.5	.9	1.9	6.2	25.2	20.5	45.8	2.2	1.8	19.5
2051	BREAD, CAKE, AND RELATED PRODUCTS. . . . .	15	10	1.6	11.5	.9	1.9	6.2	25.2	20.5	45.8	2.2	1.8	19.5
208	BEVERAGES. . . . .	53	33	2.4	15.8	.8	1.8	4.3	35.8	58.2	94.2	2.9	2.4	22.1
22	TEXTILE MILL PRODUCTS. . . . .	434	365	143.3	922.4	129.2	276.9	775.9	1 716.9	2 576.8	4 288.2	160.4	138.1	1 236.6
2211	WEAVING MILLS, COTTON. . . . .	72	66	33.5	215.9	31.2	67.7	190.1	403.1	444.8	824.1	15.8	62.2	523.9
2221	WEAVING MILLS, SYNTHETICS. . . . .	85	81	48.3	316.3	44.1	96.6	273.6	551.4	602.0	1 158.3	25.4	30.2	253.9
2241	NARROW FABRIC MILLS. . . . .	20	17	2.8	14.5	2.6	5.0	12.0	25.3	33.6	58.8	.5	EE	(D)
225	KNITTING MILLS. . . . .	70	60	15.4	96.8	13.4	28.0	74.9	188.9	383.3	565.5	66.6	6.7	63.8
226	TEXTILE FINISHING, EXCEPT WOOL. . . . .	41	36	19.4	129.9	16.7	35.1	104.7	235.4	526.9	781.2	28.0	18.9	171.9
2262	FINISHING PLANTS, SYNTHETICS. . . . .	14	13	8.4	55.7	7.2	15.5	42.7	107.3	410.0	519.4	11.3	FF	(D)
2272	TUFTED CARPETS AND RUGS. . . . .	17	12	3.5	22.7	2.9	6.2	16.7	54.4	138.9	196.0	(D)	EE	(D)
228	YARN AND THREAD MILLS. . . . .	68	59	13.7	84.4	12.5	26.2	70.5	166.9	304.9	475.0	16.8	7.4	67.4
2282	THROWING AND WINDING MILLS. . . . .	12	10	2.5	16.2	2.2	4.7	13.3	44.5	96.4	142.6	10.1	CC	(D)
229	MISCELLANEOUS TEXTILE GOODS. . . . .	44	25	5.1	32.3	4.4	9.3	25.6	65.8	106.2	168.0	4.1	5.1	39.8
2296	TIRE CORD AND FABRIC. . . . .	4	4	.9	6.4	.8	1.8	5.1	13.9	55.3	69.6	1.2	EE	(D)
23	APPAREL, OTHER TEXTILE PRODUCTS. . . . .	265	200	46.0	189.4	39.9	74.9	144.8	351.8	386.4	737.1	10.9	42.6	232.1
2311	MEN'S AND BOYS' SUITS AND COATS. . . . .	5	4	1.2	3.8	1.1	1.5	3.1	4.7	.4	5.1	.1	AA	(D)
232	MEN'S AND BOYS' FURNISHINGS. . . . .	55	52	13.0	54.9	11.4	21.7	45.3	105.9	159.8	261.9	2.6	11.5	67.9
2321	MEN'S AND BOYS' SHIRTS AND NIGHTWEAR. . . . .	30	28	8.0	35.6	6.9	13.1	28.9	68.6	133.7	200.0	1.4	8.6	50.9
2327	MEN'S AND BOYS' SEPARATE TROUSERS. . . . .	5	4	.8	2.9	.7	1.4	2.7	4.0	1.5	5.5	(Z)	CC	(D)
2328	MEN'S AND BOYS' WORK CLOTHING. . . . .	5	5	.8	2.4	.7	1.2	1.9	4.8	2.4	6.9	(Z)	BB	(D)
233	WOMEN'S, AND MISSES' OUTERWEAR. . . . .	91	73	12.6	53.1	10.8	20.2	39.6	98.3	67.1	165.5	1.3	15.5	71.0
2331	WOMEN'S, MISSES' BLOUSES, WAISTS. . . . .	14	13	2.6	9.7	2.3	4.1	7.2	12.9	2.4	15.0	.2	5.5	26.8
2335	WOMEN'S AND MISSES' DRESSES. . . . .	57	45	7.8	32.9	6.6	12.5	24.9	52.8	21.6	75.0	1.0	8.6	38.6
234	WOMEN'S, CHILDREN'S UNDERGARMENTS. . . . .	10	8	2.1	10.6	1.8	3.3	7.0	23.8	16.9	40.7	(D)	2.5	19.2
2341	WOMEN'S AND CHILDREN'S UNDERWEAR. . . . .	10	8	2.1	10.6	1.8	3.3	7.0	23.8	16.9	40.7	(D)	EE	(D)
236	CHILDREN'S OUTERWEAR. . . . .	24	23	7.7	33.1	6.7	12.2	23.8	60.7	48.4	109.0	(D)	FF	(D)
238	MISC. APPAREL AND ACCESSORIES. . . . .	14	9	1.3	5.6	1.2	2.0	4.4	10.7	2.9	13.5	.1	1.0	5.0
2384	ROBES AND DRESSING GOWNS. . . . .	7	6	1.1	4.5	1.0	1.7	3.4	7.0	1.4	8.4	(Z)	.8	3.4
239	MISC. FABRICATED TEXTILE PRODUCTS. . . . .	66	31	8.1	28.2	6.9	13.9	21.5	47.7	91.0	141.5	4.6	5.9	37.8
2391	CURTAINS AND DRAPERIES. . . . .	13	7	1.0	3.8	.9	1.6	3.0	9.2	17.9	26.4	.2	.6	4.0
2392	HOUSE FURNISHINGS, NEC. . . . .	22	11	4.8	10.6	4.1	8.2	8.6	16.5	21.7	39.4	(D)	FF	(D)
2399	FABRICATED TEXTILE PRODUCTS, NEC. . . . .	11	7	1.7	11.0	1.4	3.3	7.7	15.2	44.1	61.8	(D)	CC	(D)
24	LUMBER AND WOOD PRODUCTS. . . . .	1 227	150	13.9	77.4	12.1	23.6	60.1	168.4	253.5	418.3	21.8	(NA)	(NA)
2411	LOGGING CAMPS, LOGGING CONTRACTORS. . . . .	812	13	2.4	11.5	2.2	3.8	9.8	25.0	22.5	47.5	3.6	2.2	16.0
242	SAWMILLS AND PLANING MILLS. . . . .	239	65	4.7	25.9	4.2	8.7	21.5	58.1	83.1	140.7	11.4	5.7	31.2
243	MILLWORK, PLYWOOD, STRUC. MEMBERS. . . . .	96	42	3.8	22.1	3.2	6.2	15.7	46.8	81.0	126.9	5.1	(NA)	(NA)
2431	MILLWORK. . . . .	37	14	.9	5.3	.7	1.3	3.4	12.3	25.8	37.7	.8	(NA)	(NA)
2435	HARDWOOD VENEER AND PLYWOOD. . . . .	24	21	2.0	10.6	1.7	3.5	7.8	19.7	41.4	60.9	2.0	(NA)	(NA)
244	WOOD CONTAINERS. . . . .	13	6	.7	3.0	.6	1.3	2.6	4.2	4.9	9.0	.3	(NA)	(NA)
2449	WOOD CONTAINERS, NEC. . . . .	7	5	.5	2.1	.4	.9	1.9	3.4	3.8	7.2	.2	(NA)	(NA)
245	WOOD BUILDINGS AND MOBILE HOMES. . . . .	12	11	.8	4.6	.7	1.1	3.3	9.4	22.1	31.2	.3	(NA)	(NA)
249	MISCELLANEOUS WOOD PRODUCTS. . . . .	55	13	1.5	10.3	1.2	2.5	7.2	24.9	40.0	63.0	1.2	(NA)	(NA)
2491	WOOD PRESERVING. . . . .	11	4	.5	3.5	.4	.8	2.3	11.4	23.4	33.2	.4	.5	5.7
25	FURNITURE AND FIXTURES. . . . .	62	26	4.8	27.7	4.2	8.3	21.5	53.9	46.9	102.1	3.5	4.6	34.6
251	HOUSEHOLD FURNITURE. . . . .	39	20	4.3	24.3	3.8	7.6	19.2	49.3	40.8	89.8	3.3	(NA)	(NA)
2511	WOOD HOUSEHOLD FURNITURE. . . . .	20	9	2.4	12.6	2.1	4.3	10.0	28.0	18.6	46.8	2.3	(NA)	(NA)
2512	UPHOLSTERED HOUSEHOLD FURNITURE. . . . .	8	6	1.4	8.9	1.3	2.5	7.5	15.7	15.3	30.6	.4	(NA)	(NA)
254	PARTITIONS AND FIXTURES. . . . .	13	3	.3	2.2	.2	.5	1.5	3.9	4.0	7.9	(Z)	(NA)	(NA)
26	PAPER AND ALLIED PRODUCTS. . . . .	52	37	12.3	120.1	9.5	20.1	84.4	284.5	348.7	636.2	21.5	10.0	193.2
2631	PAPERBOARD MILLS. . . . .	5	5	3.7	42.7	2.8	6.1	30.4	116.2	122.9	238.7	8.4	4.0	103.5
2643	BAGS, EXCEPT TEXTILE BAGS. . . . .	7	5	1.5	12.2	1.2	2.8	8.9	37.7	26.2	64.2	4.8	EE	(D)

See footnotes at end of table.

TABLE 3. General Statistics for the State, by Industry Groups and Industries: 1972 and 1967—Continued

(See appendix, Explanation of Terms)

Code	Industry	1972											1967	
		Establishments		All employees		Production workers			Value added by manufacture	Cost of materials <sup>1</sup>	Value of shipments <sup>1</sup>	Capital expenditures, new	All employees	Value added by manufacture
		Total (number)	With 20 employees or more (number)	Number (1,000)	Payroll (million dollars)	Number (1,000)	Man-hours (million)	Wages (million dollars)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(1,000)	(million dollars)
265	PAPERBOARD CONTAINERS AND BOXES. . .	25	18	4.9	43.1	3.8	7.6	29.3	65.6	80.4	144.6	4.2	FF	(D)
2653	CORRUGATED AND SOLID FIBER BOXES. . .	13	10	1.4	11.3	1.1	2.3	7.7	21.9	36.4	58.4	.6	.9	9.5
27	PRINTING AND PUBLISHING. . . . .	286	52	5.1	37.0	2.9	5.5	19.0	80.1	28.1	108.1	5.5	3.9	42.9
2711	NEWSPAPERS. . . . .	84	19	2.6	18.5	1.2	2.1	7.3	42.9	11.8	54.7	3.3	2.4	28.1
275	COMMERCIAL PRINTING. . . . .	158	26	2.0	14.2	1.4	2.7	8.9	25.1	11.6	36.6	1.8	(NA)	(NA)
2752	COMMERCIAL PRINTING, LITHOGRAPHIC. . .	46	16	1.1	7.6	.6	1.2	4.1	10.8	5.3	16.1	.7	(NA)	(NA)
28	CHEMICALS AND ALLIED PRODUCTS. . .	116	53	27.1	261.8	18.8	38.2	153.8	801.0	539.9	1 374.0	125.4	19.9	474.6
282	PLASTICS MATERIALS AND SYNTHETICS. .	15	15	17.2	156.8	13.1	26.9	104.5	458.7	387.2	879.6	113.9	(NA)	(NA)
284	SOAPS, CLEANERS, AND TOILET GOODS. . .	25	10	6.5	79.2	3.4	6.5	32.5	219.2	52.9	271.5	(D)	(NA)	(NA)
286	INDUSTRIAL ORGANIC CHEMICALS. . . .	17	9	1.2	11.6	.9	1.7	7.1	48.9	58.2	101.1	5.0	(NA)	(NA)
2869	INDUSTRIAL ORGANIC CHEMICALS, NEC. . .	10	6	.6	5.8	.4	.7	2.9	25.5	29.0	54.5	2.2	(NA)	(NA)
287	AGRICULTURAL CHEMICALS. . . . .	33	12	.7	4.4	.5	.9	2.2	11.6	29.2	40.9	1.5	(NA)	(NA)
2874	PHOSPHATIC FERTILIZERS. . . . .	7	6	.4	2.3	.3	.5	1.3	7.2	14.4	21.2	1.0	(NA)	(NA)
32	STONE, CLAY, AND GLASS PRODUCTS. . .	157	65	10.1	81.9	8.3	17.2	62.2	182.4	128.9	308.2	14.3	8.7	106.5
325	STRUCTURAL CLAY PRODUCTS. . . . .	17	14	1.3	8.9	1.1	2.2	5.5	21.6	11.1	32.7	2.9	1.5	12.1
327	CONCRETE, GYPSUM, PLASTER PRODUCTS	103	34	2.5	17.1	1.9	3.9	11.7	37.0	44.3	81.5	4.9	2.1	23.1
3273	READY-MIXED CONCRETE. . . . .	45	18	1.2	8.7	.9	2.0	6.3	18.3	30.1	48.4	3.4	.8	9.0
33	PRIMARY METAL INDUSTRIES. . . . .	34	21	3.2	26.5	2.7	5.8	20.0	59.0	88.1	142.6	7.5	1.5	16.1
331	BLAST FURNACE, BASIC STEEL PROD. . .	7	6	1.8	16.2	1.5	3.3	12.4	35.4	59.4	91.3	5.0	BB	(D)
335	NONFERROUS ROLLING AND DRAWING. . .	8	6	.6	4.7	.5	1.1	3.3	13.0	22.5	34.5	1.8	AA	(D)
336	NONFERROUS FOUNDRIES. . . . .	12	6	.4	3.0	.3	.7	2.0	5.2	3.9	9.1	.4	.2	1.4
34	FABRICATED METAL PRODUCTS. . . . .	166	75	8.2	63.8	6.4	13.6	43.9	115.4	180.5	292.1	7.1	(NA)	(NA)
343	PLUMBING, HEATING, EXC. ELECTRIC. .	8	8	.7	4.0	.6	1.1	3.0	10.1	11.5	21.2	.3	(NA)	(NA)
344	FABRICATED STRUCTURAL METAL PROD. .	101	43	4.2	33.8	3.1	6.8	22.2	50.4	101.6	151.7	2.8	3.4	35.1
3441	FABRICATED STRUCTURAL METAL PRODUCTS	33	20	2.3	19.5	1.6	3.8	12.4	22.4	58.1	80.9	1.0	1.3	15.1
3446	ARCHITECTURAL METALWORK. . . . .	20	4	.5	3.4	.4	.8	2.3	4.1	3.8	7.8	.3	.2	2.1
347	METAL SERVICES, NEC. . . . .	20	5	.3	1.6	.2	.4	1.1	3.2	1.3	4.4	.2	.2	1.9
349	MISC. FABRICATED METAL PRODUCTS. .	24	12	1.1	9.5	.8	1.7	6.6	18.7	23.7	42.9	2.3	(NA)	(NA)
35	MACHINERY, EXCEPT ELECTRICAL. . .	284	94	19.5	152.7	14.3	28.8	94.9	419.6	343.5	735.3	39.6	13.8	140.8
353	CONSTRUCTION AND RELATED MACHINERY	18	10	1.4	10.6	.8	1.7	6.2	25.3	27.3	49.8	2.6	CC	(D)
354	METALWORKING MACHINERY. . . . .	33	10	2.6	18.4	1.9	3.8	11.7	32.5	37.1	67.6	1.0	1.9	21.3
355	SPECIAL INDUSTRY MACHINERY. . . . .	81	44	7.5	59.1	5.6	11.2	36.6	134.7	85.0	216.3	12.2	6.8	66.9
3552	TEXTILE MACHINERY. . . . .	67	34	5.4	41.0	4.4	9.1	29.8	89.2	55.9	142.5	8.5	FF	(D)
356	GENERAL INDUSTRIAL MACHINERY. . . .	14	8	2.3	16.9	1.9	4.0	12.4	50.1	30.3	78.1	4.1	1.9	24.7
3562	BALL AND ROLLER BEARINGS. . . . .	6	5	2.1	15.5	1.8	3.7	11.6	44.7	27.8	72.3	(D)	1.5	19.5
357	OFFICE AND COMPUTING MACHINES. . . .	5	4	1.1	7.4	.9	1.6	5.0	23.9	27.1	45.0	2.1	EE	(D)
359	MISC. MACHINERY, EXCEPT ELECTRICAL	115	9	.8	6.7	.7	1.4	4.8	12.2	6.8	19.0	.5	(NA)	(NA)
36	ELECTRIC, ELECTRONIC EQUIPMENT. . .	51	39	13.0	81.2	10.6	20.9	56.9	195.0	143.2	328.4	16.2	(NA)	(NA)
362	ELECTRICAL INDUSTRIAL APPARATUS. . .	10	8	1.7	12.5	1.3	2.4	7.9	49.2	24.6	67.6	2.1	EE	(D)
363	HOUSEHOLD APPLIANCES. . . . .	7	6	2.6	15.1	2.2	4.2	11.5	45.5	44.0	87.5	(D)	1.1	18.0
364	ELECT. LIGHTING AND WIRING EQUIP. .	7	6	1.1	5.8	1.0	1.8	4.5	11.8	11.0	21.9	.4	1.1	14.0
367	ELECTRONIC COMPONENTS AND ACCESS. .	10	8	5.8	34.4	4.8	9.6	24.7	51.3	35.0	86.8	2.9	5.4	42.6
369	MISC. ELECTRICAL EQUIP., SUPPLIES. .	8	6	1.1	8.2	.9	2.0	5.9	26.7	22.0	47.6	2.3	.9	9.7
37	TRANSPORTATION EQUIPMENT. . . . .	61	30	3.5	25.1	2.7	5.4	16.7	44.5	44.0	88.8	10.3	(NA)	(NA)
371	MOTOR VEHICLES AND EQUIPMENT. . . .	9	4	1.2	7.9	1.1	2.2	6.2	13.7	16.0	29.9	.4	CC	(D)
373	SHIP, BOAT BUILDING, REPAIRING. . .	26	12	.8	6.5	.7	1.4	5.1	13.0	11.6	23.9	.9	.9	7.9
38	INSTRUMENTS AND RELATED PRODUCTS	20	11	4.0	23.9	3.4	6.5	18.0	80.0	48.7	129.3	2.5	(NA)	(NA)
382	MEASURING AND CONTROLLING DEVICES. .	6	4	1.4	7.9	1.2	2.3	5.8	20.7	8.0	30.9	.5	(NA)	(NA)
39	MISC. MANUFACTURING INDUSTRIES. . .	73	21	5.0	28.8	4.2	8.1	20.7	79.2	46.5	123.9	5.2	4.3	40.4
394	TOYS AND SPORTING GOODS. . . . .	18	7	2.1	11.6	1.8	3.3	8.0	24.0	17.8	41.5	2.4	1.7	15.8
399	MISCELLANEOUS MANUFACTURES. . . . .	43	7	1.0	7.0	.8	1.6	4.8	14.3	6.0	20.3	1.1	.9	9.4
--	ADMINISTRATIVE AND AUXILIARY. . . .	72	47	7.5	83.1	-	-	-	-	-	-	-	6.1	-

Note: The following symbols indicate employment size range for 1967:

AA less than 250 employees      EE 1,000 to 2,499 employees  
BB 250 to 499 employees      FF 2,500 employees and over  
CC 500 to 999 employees

- Represents zero. (NA) Not available. Because of a revision to this industry or industry group in the 1972 edition of the SIC manual, 1967 census data are not available on a comparable basis.

<sup>1</sup>The total cost of materials and value of shipments for industry groups shown may include extensive duplication arising from shipments between establishments in the same industry classification. (For a more complete explanation, see appendix.)

<sup>2</sup>Includes figures for industry groups which have been withheld from publication in order to (a) avoid disclosing figures for individual companies or (b) permit further checking of figures for smaller industry groups. Additional detail will appear in the final report for this State.



## Appendix A. SCOPE AND COVERAGE

This report is one of a series presenting preliminary information, by State, from the 1972 Census of Manufactures. The data will be superseded in a final report which, in turn, will be included in *Volume III, Area Statistics, 1972 Census of Manufactures*. The final report will include a comprehensive discussion of the concepts and definitions used in the census.

The census of manufactures covers each manufacturing establishment in the United States with one paid employee or more; manufacturing establishments with no employees are excluded. Firms which operated more than one establishment were required to file a separate report for each location. Companies which engaged in distinctly different lines of activity at one location were asked to submit separate reports if the company records permitted such a separation and the activities were of significant size.

This report includes figures for administrative offices, warehouses, garages, or other auxiliary units which service manufacturing establishments.

In the 1972 census, the approximately 120,000 manufacturing establishments with fewer than 10 employees were excused from filing reports. Under special arrangements which safeguarded the confidentiality of both tax and census records, data on payrolls, sales, and industry classification from the administrative records of the Social Security Administration and the Internal Revenue Service were made available to the Census Bureau for use in the 1972 Economic Censuses (retail and wholesale trade, service industries, construction industries, manufactures, and mineral industries). Estimates for data other than payrolls and sales for these small establishments were constructed from industry averages. The effect on industry aggregates is slight in most industries. For manufacturing as a whole, these small establishments account for less than 3 percent of the payrolls and value added.

Establishments are classified by industry in accordance with industry definitions described in the 1972 edition of the Standard Industrial Classification (SIC) Manual. For 1972, the SIC was significantly revised and the comparability with prior year's data for some industries was significantly affected. The comparability at the 2- and 3-digit SIC levels was less affected. The final volumes of the 1972 Census of Manufactures will contain a table relating aggregates based on the 1972 SIC with aggregates derived from classifying establishments according to the 1967 SIC definitions.

As in earlier censuses, a number of small establishments may have been misclassified as to industry. However, such possible misclassifications have significant effect on *none* of the statistics except the number of establishments. As indicated above, report forms were not mailed to very small establishments (fewer than 10 employees). The industry classifications for these establishments were assigned on the basis of brief descriptions of the general activity of the establishment. Where the description is incomplete or there are relatively fine lines of demarcation among industries or between manufacturing and nonmanufacturing activity, the code assigned to an establishment could differ from that which would have been assigned on the basis of more complete product information. Therefore, the total establishment count for individual industries should be viewed as an approximation rather than a precise measurement. The counts for establishments with 20 employees or more are more reliable than the total number of establishments.

More detailed figures for this State will appear in the final census reports. Final reports will also include a comprehensive discussion of such concepts as "industry" and "establishment," as well as the various statistical items such as "employment," "value of shipments," and "value added." Similar preliminary and final reports will be issued for other States during the coming months. A series of preliminary summary reports showing U.S. totals for each manufacturing industry and for each State are being issued. Final industry reports and final area reports will be published during 1974.

Order forms describing the individual reports and listing their prices may be obtained from any U.S. Department of Commerce district office or from the Publications Distribution Section, Social and Economic Statistics Administration, Washington, D.C. 20233.

The 1972 Census of Manufactures is the 29th census of manufacturing establishments in the United States. For 1972, it was conducted jointly with the censuses of mineral industries, construction industries, retail trade, wholesale trade, and selected services under authority of Title 13 of the United States Code. Title 13 specifies that a census of manufactures be conducted every 5 years and, as amended, to cover years ending in "2" and "7". Title 13 also authorizes an annual sample survey of manufacturing establishments in interim years.



## Appendix B. EXPLANATION OF TERMS

*(For a more complete discussion of these terms and the method of compiling the Census of Manufactures, see the "Introduction" to the 1967 Census of Manufactures, Volume III).*

**All Employees**—All full-time and part-time employees on the payrolls of operating manufacturing establishments for any part of the pay period ending nearest the 12th of the months specified on the report form. Included are all persons on paid sick leave, paid holidays, and paid vacations during these pay periods. Officers of corporations are included as employees; proprietors and partners of unincorporated firms are excluded. The "all employee" number is the average number of production workers for the midmonth payroll period of March, May, August, and November plus the number of nonproduction employees in mid-March.

**Number of Production Workers**—Workers (up through the working foreman level) engaged in fabricating, processing, assembling, inspecting, receiving, packing, warehousing, shipping (but not delivering), and maintenance, repair, janitorial, and watchman services, product development, auxiliary production for plant's own use (e.g., powerplant), recordkeeping, and other closely associated services. Proprietors and partners are excluded.

**Payroll**—This item includes all forms of compensation such as salaries, wages, commissions, dismissal pay, bonuses, vacation and sick leave pay, and compensation in kind, prior to such deductions as employees' Social Security contributions, withholding taxes, group insurance, union dues, and savings bonds. The total includes salaries of officers of these establishments, if a corporation; it excludes payments to the proprietor or partners, if an unincorporated concern. Respondents were told that in reporting they could follow the definition of payrolls used for calculating the Federal withholding tax.

**Man-Hours of Production Workers**—This total relates to production-worker man-hours worked or paid for at the plant including actual overtime hours (not straight-time equivalent hours). It excludes hours paid for vacation, holidays, or sick leave when the employee was not at the plant.

**Cost of Materials**—The term "Cost of Materials" refers to charges actually paid or payable for items consumed or put into production during the year, including freight and other direct charges incurred by the establishment in acquiring these materials. It includes the cost of materials or fuel consumed regardless of

whether these items were purchased by the establishment from other companies, transferred to it from other establishments of the same company, or withdrawn from inventory during the year. The establishment was requested to value materials transferred from other parts of the company at its approximate market value, not at cost of production. The important components of this cost item are (a) all raw materials, semifinished goods, parts, components, containers, scrap, and supplies put into production or used as operating supplies and for repair and maintenance during the year; (b) electric energy purchased; (c) fuels consumed for heat, power, or the generation of electricity; (d) work done by others on materials or parts furnished by manufacturing establishments (contract work); and (e) products bought and resold in the same condition.

**Value of Shipments**—The value of shipments is the received or receivable net selling value, f.o.b. plant (exclusive of freight and taxes), of all products shipped, both primary and secondary, as well as all miscellaneous receipts such as receipts for contract work performed for others, installation and repair, sales of scrap, and sale of products bought and resold without further processing. Included are all items made by the establishment or for it under contract from materials owned by it whether sold, transferred to other plants of the same company, or shipped on consignment. The net selling value of products made in one plant on a contract basis from materials owned by another was reported by the plant providing the materials.

In the case of multiunit companies, the manufacturer was requested to report the value of products transferred to other establishments of the same company at full economic value; i.e., to include not only the direct costs of production but also a reasonable proportion of "all other costs" (including company overhead) and profit.

**Duplication in Cost of Materials and Value of Products**—The aggregate cost of materials and value-of-shipments figures for industry groups and for all manufacturing industries may include large amounts of duplication since the products of some industries are used as materials by others. With some important exceptions, such as motor vehicles and parts, this duplication is not significant within individual industries but arises from the addition of the totals of related industries in successive stages of the production of a finished manufactured product. Examples are the addition of flour mills to bakeries in the food group and the addition of pulp mills to paper mills in the paper and allied products group of industries. Esti-



mates of this duplication indicate that the value of manufactured products exclusive of such duplication—the value of finished manufactures—approximates two-thirds of the total value of products.

Prior to 1962, the Bureau of the Census did not publish figures for cost of materials or value of shipments if they contained significant duplication. Effective with the 1962 annual survey these figures were shown at all industry levels for the United States to meet the requests for their use in studies in which the presence of an indeterminate amount of duplication is not a limiting factor. However, they are appropriately footnoted. Effective with the 1964 annual survey, these industry group totals are also shown at the State, standard metropolitan statistical area, and large-county level.

Even where there is no significant amount of duplication, value-of-shipments figures are deficient as measures of the relative economic importance of individual manufacturing industries or geographic areas because of the wide variation in ratio of materials, labor, and other processing costs to value of shipments among industries.

**Value Added by Manufacture**—This measure of manufacturing activity is derived by subtracting the cost of materials, supplies, containers, fuel, purchased electricity, and cost of resales contract work from the value of shipments for products manufactured plus resales and receipts for services rendered. The result of this calculation is adjusted by the net change in finished goods and work-in-process inventories between the beginning and end of the year. (In the few industries that report value of production rather than value of shipments, only changes in work-in-process inventories are used to adjust value added. In the shipbuilding and repairing industry, no inventory adjustment is made.)

“Value added” avoids the duplication in the value of shipments figure which results from the use of products of some establishments as materials by others. Value added is considered to be the best value measure available for comparing the relative economic importance of manufacturing among industries and geographic areas.

**Expenditures for Plant and Equipment**—Manufacturing establishments in operation and establishments under construction but not yet in operation, were asked to report their expenditures for (a) permanent additions and major alterations to the manufacturing establishment, and (b) new machinery and equipment used for replacement purposes and additions to plant capacity if they are of the type for which depreciation accounts are ordinarily maintained.

These totals exclude expenditures for new facilities and equipment leased from nonmanufacturing concerns; new facilities owned by the Federal Government but operated under contract by private companies; and plant and equipment furnished to the manufacturer by communities and nonprofit organizations. Expenditures for used plant and equipment (although reported in the census), expenditures for land, and cost of maintenance and repairs charged as current operating expense are also omitted from the figures for new capital expenditures.

**Central Administrative Offices and Auxiliary Units**—In the 1972 census as in previous years, respondents were asked to file separate reports for central administrative offices or auxiliary units which were (1) at different locations from the establishments served or, (2) at the same location as one of these establishments but were not operated as an integral part thereof and served two or more establishments. The functions of employees in central administrative offices include general company policy determination, planning and management (that is, company purchasing, accounting, general engineering, direction of company personnel matters, and legal and patent matters). Auxiliaries are storage facilities, garages, repair shops, purchasing offices, sales promotion offices, and research laboratories serving the plants or central management of the company.

**Standard Metropolitan Statistical Areas**—Standard metropolitan statistical areas (SMSA) are integrated economic and social units with a large volume of daily travel and communication between the central city and outlying parts of the area.<sup>1</sup> Each area (except in New England) consists of one whole county or more. An area may contain not only highly industrialized counties but also adjoining counties which, though primarily residential in character, contribute significantly to the industrial counties' labor force and are socially and economically integrated with the central city. These areas are defined by the Federal Committee on Standard Metropolitan Statistical Areas of the Office of Management and Budget for general-purpose use throughout the Federal Government in presenting economic and social data. In the New England States, similar intergration criteria are applied in defining

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<sup>1</sup> Each standard metropolitan statistical area must include either (1) a city with 50,000 or more inhabitants, or (2) a city having a population of at least 25,000 which (a) with the addition of the population of contiguous places has a population density of at least 1,000 persons per square mile; (b) constitutes, for general economic and social purposes, a single community with a combined population of at least 50,000; and (c) includes a total population of at least 75,000 in the county or counties in which the city and contiguous places are located.

SMSA's on a city and town basis because towns rather than counties are regarded as the significant unit in this region of the country.

The requirement that each SMSA consist of county units (except in New England) sometimes results in the inclusion in an area of considerable amount of territory which would not ordinarily be considered "metropolitan," much less "industrial." It is recognized that metropolitan areas could be more accurately defined in terms of smaller area segments such as minor civil

divisions, but the usefulness of areas so defined would be limited by the fact that many types of economic and social data are available only on a county basis.

Each SMSA is designated by the name of the principal city of the area. In addition to the name of the principal city, the area title may include one or two additional city names.

The data for SMSA's which changed definition since the 1967 census have not been retabulated on the new basis for years prior to 1972.







# PRELIMINARY REPORT

# 1972 CENSUS OF MANUFACTURES

## AREA SERIES

C72(P)-S42

Issued April 1974

U.S. DEPARTMENT OF COMMERCE • Social and Economic Statistics Administration • BUREAU OF THE CENSUS

## South Dakota

Value added by manufacturing in 1972 in the State of South Dakota amounted to \$273 million, a 20-percent increase from 1971 and a 59-percent increase from 1967.

This report presents preliminary results from the 1972 Census of Manufactures for the State, its Standard Metropolitan Statistical Area, and its counties.

Data are provided for industry groups within the State. Historical data, back to 1958, are included for the State as a whole,

and 1967 figures on employment and value added are provided for the smaller areas.

The figures in this report have been subjected to only preliminary review and must be regarded as approximations of the final census figures. No adjustments have been made in the value figures for changes in price level.

For an explanation of the terms used in the tables, see the appendix at the end of this report.

TABLE 1. General Statistics for the State: 1972 and Earlier Years

(See appendix, Explanation of Terms)

Year	Establishments		All employees <sup>1</sup>		Production workers			Value added by manufacture	Cost of materials <sup>2</sup>	Value of shipments <sup>2</sup>	Capital expenditures, new
	Total	With 20 employees or more	Number	Payroll	Number	Man-hours	Wages				
	(number)	(number)	(1,000)	(million dollars)	(1,000)	(millions)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(million dollars)
SOUTH DAKOTA											
1972 Census .....	601	144	17.2	133.0	12.7	24.7	88.2	272.5	650.4	916.4	20.0
1971 ASM .....	(NA)	(NA)	16.1	118.8	11.3	22.5	78.4	226.2	516.8	741.3	13.5
1970 ASM .....	(NA)	(NA)	17.2	120.7	12.1	23.8	80.1	230.2	550.3	780.0	12.3
1969 ASM .....	(NA)	(NA)	16.6	107.2	12.2	23.9	72.1	213.5	540.6	751.9	6.6
1968 ASM .....	(NA)	(NA)	16.6	101.5	12.3	24.1	69.2	193.9	523.3	714.6	10.7
1967 Census .....	604	137	15.5	92.5	11.4	22.4	61.7	171.3	494.5	663.3	8.2
1966 ASM .....	(NA)	(NA)	14.1	81.0	10.3	21.4	55.5	166.3	493.0	653.1	7.7
1965 ASM .....	(NA)	(NA)	14.1	76.2	10.4	21.1	52.2	154.2	436.0	586.5	10.9
1964 ASM .....	(NA)	(NA)	13.7	73.6	10.2	21.2	50.2	140.8	431.0	571.3	9.8
1963 Census .....	586	115	13.2	70.0	9.6	19.9	48.0	140.0	(NA)	(NA)	7.3
1962 ASM .....	(NA)	(NA)	14.4	68.1	10.8	20.3	47.0	137.5	(NA)	(NA)	15.4
1961 ASM .....	(NA)	(NA)	13.8	67.2	10.1	21.0	46.3	124.1	(NA)	(NA)	10.2
1960 ASM .....	(NA)	(NA)	13.4	63.5	10.0	20.6	43.9	121.7	(NA)	(NA)	7.5
1959 ASM .....	(NA)	(NA)	13.3	62.6	10.0	20.1	44.2	132.3	(NA)	(NA)	8.9
1958 Census .....	575	109	12.9	54.8	9.6	18.6	37.5	114.3	(NA)	(NA)	5.2

Note: "ASM" data are based on a representative sample of manufacturing establishments canvassed in the Annual Survey of Manufactures. These estimates may differ from the results of a complete canvass of all manufacturing establishments. The standard errors associated with these estimates are published in the annual survey of manufactures volumes for this period. For comparative purposes, the 1972 ASM estimate for the State of South Dakota was 17 thousand employees, and \$288 million in value added with corresponding standard error of estimate of 4 and 4.

(NA) Not available.

<sup>1</sup>Includes employment and payroll at central administrative offices and auxiliary units. (For a definition of these units, see appendix.)

<sup>2</sup>The total cost of materials and value of shipments may include extensive duplication arising from shipments between establishments in the same industry classification. (For a more complete explanation, see appendix.)

TABLE 2. General Statistics for the State, Standard Metropolitan Statistical Areas, and Counties: 1972 and 1967

(See appendix, Explanation of Terms)

State, standard metropolitan statistical areas, and counties <sup>1</sup>	1972											1967	
	Establishments		All employees <sup>2</sup>		Production workers			Value added by manufacture	Cost of materials <sup>3</sup>	Value of shipments <sup>3</sup>	Capital expenditures, new	All employees	Value added by manufacture
	Total	With 20 employees or more	Number	Payroll	Number	Man-hours	Wages						
	(number)	(number)	(1,000)	(million dollars)	(1,000)	(million)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(1,000)	(million dollars)
SOUTH DAKOTA, TOTAL . . . . .	601	144	17.2	133.0	12.7	24.7	88.2	272.5	650.4	916.4	20.0	15.5	171.3
STANDARD METROPOLITAN STATISTICAL AREAS <sup>4</sup>													
SIOUX FALLS . . . . .	101	37	6.9	64.3	5.0	9.6	43.4	114.5	354.1	465.7	5.0	6.9	70.4
COUNTIES													
BEADLE . . . . .	23	10	.9	7.7	.7	1.5	5.9	16.6	61.2	77.4	1.1	(D)	(D)
BROOKINGS . . . . .	18	5	.4	3.4	.3	.6	1.8	16.9	12.1	28.8	(D)	.1	1.4
BROWN . . . . .	37	10	1.4	8.8	1.0	2.1	5.4	17.5	34.2	50.8	1.3	1.5	14.6
CODINGTON . . . . .	20	6	.8	5.2	.6	1.2	3.6	12.6	12.9	25.2	1.8	.5	8.1
DAVISON . . . . .	17	6	.4	3.6	.3	.5	2.5	5.5	21.5	26.9	.1	.5	12.1
GRANT . . . . .	11	5	.4	3.1	.3	.7	2.3	5.2	20.8	26.0	.4	.4	3.6
LAWRENCE . . . . .	22	7	.3	1.8	.3	.6	1.5	5.1	4.6	9.4	.6	.4	4.1
LINCOLN . . . . .	12	5	.7	3.0	.5	.9	1.9	5.3	3.9	9.1	.1	.2	1.7
MINNEHAHA . . . . .	101	37	6.9	64.3	5.0	9.6	43.4	114.5	354.1	465.7	5.0	6.9	70.4
PENNINGTON . . . . .	59	11	1.3	10.3	.8	1.7	5.3	26.0	42.2	68.0	1.6	1.5	16.2
YANKTON . . . . .	20	8	1.0	6.0	.7	1.5	3.8	10.7	18.0	28.7	.6	.8	7.9

(D) Withheld to avoid disclosing figures for individual companies.

<sup>1</sup>Some counties were withheld from publication in order to (a) avoid disclosing figures for individual companies or (b) permit further checking of the figures for smaller counties. Additional detail will appear in the final report for this State.<sup>2</sup>Includes employment and payroll at central administrative offices and auxiliary units. (For a definition of these units, see appendix.)<sup>3</sup>The total cost of materials and value of shipments may include extensive duplication arising from shipments between establishments in the same industry classification. (For a more complete explanation, see appendix.)<sup>4</sup>The standard metropolitan statistical area in this State is defined as follows:

SIOUX FALLS SMSA: Coextensive with Minnehaha County, SD.

TABLE 3. General Statistics for the State, by Industry Groups and Industries: 1972 and 1967

(See appendix, Explanation of Terms)

Code	Industry	1972											1967	
		Establishments		All employees		Production workers			Value added by manufacture	Cost of materials <sup>1</sup>	Value of shipments <sup>1</sup>	Capital expenditures, new	All employees	Value added by manufacture
		Total	With 20 employees or more	Number	Payroll	Number	Man-hours	Wages						
		(number)	(number)	(1,000)	(million dollars)	(1,000)	(million)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(1,000)	(million dollars)
	ALL INDUSTRIES, TOTAL <sup>2</sup> . . . . .	601	144	17.2	133.0	12.7	24.7	88.2	272.5	650.4	916.4	20.0	15.5	171.3
20	FOOD AND KINDRED PRODUCTS . . . . .	123	49	7.2	65.3	5.2	10.3	45.4	116.9	506.2	621.3	6.3	7.8	95.0
201	MEAT PRODUCTS . . . . .	21	11	4.6	44.9	3.7	7.1	35.4	77.2	378.4	454.6	3.4	5.0	48.6
202	DAIRY PRODUCTS . . . . .	37	15	1.2	8.6	.6	1.4	4.4	14.7	85.3	99.6	1.1	1.3	23.8
2026	FLUID MILK . . . . .	16	10	.7	5.4	.2	.5	1.9	7.8	36.5	44.4	.6	CC	(D)
204	GRAIN MILL PRODUCTS . . . . .	23	6	.5	3.6	.2	.5	1.5	8.8	27.0	35.5	.5	.4	10.4
208	BEVERAGES . . . . .	11	8	.3	2.2	.2	.3	1.1	3.8	4.3	8.1	.4	.3	3.4
24	LUMBER AND WOOD PRODUCTS . . . . .	52	17	1.3	9.4	1.1	2.2	6.4	21.7	31.8	52.4	2.2	(NA)	(NA)
242	SAWMILLS AND PLANING MILLS . . . . .	14	5	.3	1.9	.2	.5	1.5	7.1	3.7	10.5	1.0	.3	3.4
2421	SAWMILLS AND PLANING MILLS, GENERAL . . . . .	14	5	.3	1.9	.2	.5	1.5	7.1	3.7	10.5	1.0	.3	3.4
27	PRINTING AND PUBLISHING . . . . .	168	17	1.6	10.9	1.0	1.8	6.0	22.9	7.1	30.0	2.4	1.6	15.8
2711	NEWSPAPERS . . . . .	113	11	1.1	7.1	.7	1.2	3.9	15.9	3.6	19.5	1.8	1.0	11.3
275	COMMERCIAL PRINTING . . . . .	47	5	.4	3.1	.3	.4	1.8	5.7	2.8	8.6	.5	(NA)	(NA)
30	RUBBER AND MISC. PLASTICS PROD . . . . .	12	3	.4	2.0	.3	.6	1.7	5.7	2.1	7.7	.5	(NA)	(NA)
32	STONE, CLAY, AND GLASS PRODUCTS . . . . .	62	11	.7	5.9	.5	1.1	4.0	11.0	11.6	22.7	1.1	.7	9.0
35	MACHINERY, EXCEPT ELECTRICAL . . . . .	47	16	2.0	14.0	1.6	3.2	9.1	36.5	42.8	78.0	2.0	1.2	14.3
353	CONSTRUCTION AND RELATED MACHINERY . . . . .	9	4	.3	3.0	.2	.5	2.0	6.4	4.6	11.2	.6	BB	(D)
379	MISC. TRANSPORTATION EQUIPMENT . . . . .	10	3	.3	2.5	.2	.5	1.9	6.2	9.4	14.7	.6	(NA)	(NA)

Note: The following symbols indicate employment size range for 1967:

AA less than 250 employees      EE 1,000 to 2,499 employees  
BB 250 to 199 employees      FF 2,500 employees and over  
CC 500 to 999 employees

(NA) Not available. Because of a revision to this industry or industry group in the 1972 edition of the SIC Manual, 1967 census data are not available on a comparable basis.

(D) Withheld to avoid disclosing figures for individual companies.

<sup>1</sup>The total cost of materials and value of shipments for industry groups shown may include extensive duplication arising from shipments between establishments in the same industry classification. (For a more complete explanation, see appendix.)<sup>2</sup>Includes figures for industry groups which have been withheld from publication in order to (a) avoid disclosing figures for individual companies or (b) permit further checking of figures for smaller industry groups. Additional detail will appear in the final report for this State.



## Appendix A. SCOPE AND COVERAGE

This report is one of a series presenting preliminary information, by State, from the 1972 Census of Manufactures. The data will be superseded in a final report which, in turn, will be included in *Volume III, Area Statistics, 1972 Census of Manufactures*. The final report will include a comprehensive discussion of the concepts and definitions used in the census.

The census of manufactures covers each manufacturing establishment in the United States with one paid employee or more; manufacturing establishments with no employees are excluded. Firms which operated more than one establishment were required to file a separate report for each location. Companies which engaged in distinctly different lines of activity at one location were asked to submit separate reports if the company records permitted such a separation and the activities were of significant size.

This report includes figures for administrative offices, warehouses, garages, or other auxiliary units which service manufacturing establishments.

In the 1972 census, the approximately 120,000 manufacturing establishments with fewer than 10 employees were excused from filing reports. Under special arrangements which safeguarded the confidentiality of both tax and census records, data on payrolls, sales, and industry classification from the administrative records of the Social Security Administration and the Internal Revenue Service were made available to the Census Bureau for use in the 1972 Economic Censuses (retail and wholesale trade, service industries, construction industries, manufactures, and mineral industries). Estimates for data other than payrolls and sales for these small establishments were constructed from industry averages. The effect on industry aggregates is slight in most industries. For manufacturing as a whole, these small establishments account for less than 3 percent of the payrolls and value added.

Establishments are classified by industry in accordance with industry definitions described in the 1972 edition of the Standard Industrial Classification (SIC) Manual. For 1972, the SIC was significantly revised and the comparability with prior year's data for some industries was significantly affected. The comparability at the 2- and 3-digit SIC levels was less affected. The final volumes of the 1972 Census of Manufactures will contain a table relating aggregates based on the 1972 SIC with aggregates derived from classifying establishments according to the 1967 SIC definitions.

As in earlier censuses, a number of small establishments may have been misclassified as to industry. However, such possible misclassifications have significant effect on *none* of the statistics except the number of establishments. As indicated above, report forms were not mailed to very small establishments (fewer than 10 employees). The industry classifications for these establishments were assigned on the basis of brief descriptions of the general activity of the establishment. Where the description is incomplete or there are relatively fine lines of demarcation among industries or between manufacturing and nonmanufacturing activity, the code assigned to an establishment could differ from that which would have been assigned on the basis of more complete product information. Therefore, the total establishment count for individual industries should be viewed as an approximation rather than a precise measurement. The counts for establishments with 20 employees or more are more reliable than the total number of establishments.

More detailed figures for this State will appear in the final census reports. Final reports will also include a comprehensive discussion of such concepts as "industry" and "establishment," as well as the various statistical items such as "employment," "value of shipments," and "value added." Similar preliminary and final reports will be issued for other States during the coming months. A series of preliminary summary reports showing U.S. totals for each manufacturing industry and for each State are being issued. Final industry reports and final area reports will be published during 1974.

Order forms describing the individual reports and listing their prices may be obtained from any U.S. Department of Commerce district office or from the Publications Distribution Section, Social and Economic Statistics Administration, Washington, D.C. 20233.

The 1972 Census of Manufactures is the 29th census of manufacturing establishments in the United States. For 1972, it was conducted jointly with the censuses of mineral industries, construction industries, retail trade, wholesale trade, and selected services under authority of Title 13 of the United States Code. Title 13 specifies that a census of manufactures be conducted every 5 years and, as amended, to cover years ending in "2" and "7". Title 13 also authorizes an annual sample survey of manufacturing establishments in interim years.



## Appendix B. EXPLANATION OF TERMS

*(For a more complete discussion of these terms and the method of compiling the Census of Manufactures, see the "Introduction" to the 1967 Census of Manufactures, Volume III).*

**All Employees**—All full-time and part-time employees on the payrolls of operating manufacturing establishments for any part of the pay period ending nearest the 12th of the months specified on the report form. Included are all persons on paid sick leave, paid holidays, and paid vacations during these pay periods. Officers of corporations are included as employees; proprietors and partners of unincorporated firms are excluded. The "all employee" number is the average number of production workers for the midmonth payroll period of March, May, August, and November plus the number of nonproduction employees in mid-March.

**Number of Production Workers**—Workers (up through the working foreman level) engaged in fabricating, processing, assembling, inspecting, receiving, packing, warehousing, shipping (but not delivering), and maintenance, repair, janitorial, and watchman services, product development, auxiliary production for plant's own use (e.g., powerplant), recordkeeping, and other closely associated services. Proprietors and partners are excluded.

**Payroll**—This item includes all forms of compensation such as salaries, wages, commissions, dismissal pay, bonuses, vacation and sick leave pay, and compensation in kind, prior to such deductions as employees' Social Security contributions, withholding taxes, group insurance, union dues, and savings bonds. The total includes salaries of officers of these establishments, if a corporation; it excludes payments to the proprietor or partners, if an unincorporated concern. Respondents were told that in reporting they could follow the definition of payrolls used for calculating the Federal withholding tax.

**Man-Hours of Production Workers**—This total relates to production-worker man-hours worked or paid for at the plant including actual overtime hours (not straight-time equivalent hours). It excludes hours paid for vacation, holidays, or sick leave when the employee was not at the plant.

**Cost of Materials**—The term "Cost of Materials" refers to charges actually paid or payable for items consumed or put into production during the year, including freight and other direct charges incurred by the establishment in acquiring these materials. It includes the cost of materials or fuel consumed regardless of

whether these items were purchased by the establishment from other companies, transferred to it from other establishments of the same company, or withdrawn from inventory during the year. The establishment was requested to value materials transferred from other parts of the company at its approximate market value, not at cost of production. The important components of this cost item are (a) all raw materials, semifinished goods, parts, components, containers, scrap, and supplies put into production or used as operating supplies and for repair and maintenance during the year; (b) electric energy purchased; (c) fuels consumed for heat, power, or the generation of electricity; (d) work done by others on materials or parts furnished by manufacturing establishments (contract work); and (e) products bought and resold in the same condition.

**Value of Shipments**—The value of shipments is the received or receivable net selling value, f.o.b. plant (exclusive of freight and taxes), of all products shipped, both primary and secondary, as well as all miscellaneous receipts such as receipts for contract work performed for others, installation and repair, sales of scrap, and sale of products bought and resold without further processing. Included are all items made by the establishment or for it under contract from materials owned by it whether sold, transferred to other plants of the same company, or shipped on consignment. The net selling value of products made in one plant on a contract basis from materials owned by another was reported by the plant providing the materials.

In the case of multiunit companies, the manufacturer was requested to report the value of products transferred to other establishments of the same company at full economic value; i.e., to include not only the direct costs of production but also a reasonable proportion of "all other costs" (including company overhead) and profit.

**Duplication in Cost of Materials and Value of Products**—The aggregate cost of materials and value-of-shipments figures for industry groups and for all manufacturing industries may include large amounts of duplication since the products of some industries are used as materials by others. With some important exceptions, such as motor vehicles and parts, this duplication is not significant within individual industries but arises from the addition of the totals of related industries in successive stages of the production of a finished manufactured product. Examples are the addition of flour mills to bakeries in the food group and the addition of pulp mills to paper mills in the paper and allied products group of industries. Esti-



mates of this duplication indicate that the value of manufactured products exclusive of such duplication—the value of finished manufactures—approximates two-thirds of the total value of products.

Prior to 1962, the Bureau of the Census did not publish figures for cost of materials or value of shipments if they contained significant duplication. Effective with the 1962 annual survey these figures were shown at all industry levels for the United States to meet the requests for their use in studies in which the presence of an indeterminate amount of duplication is not a limiting factor. However, they are appropriately footnoted. Effective with the 1964 annual survey, these industry group totals are also shown at the State, standard metropolitan statistical area, and large-county level.

Even where there is no significant amount of duplication, value-of-shipments figures are deficient as measures of the relative economic importance of individual manufacturing industries or geographic areas because of the wide variation in ratio of materials, labor, and other processing costs to value of shipments among industries.

**Value Added by Manufacture**—This measure of manufacturing activity is derived by subtracting the cost of materials, supplies, containers, fuel, purchased electricity, and cost of resales contract work from the value of shipments for products manufactured plus resales and receipts for services rendered. The result of this calculation is adjusted by the net change in finished goods and work-in-process inventories between the beginning and end of the year. (In the few industries that report value of production rather than value of shipments, only changes in work-in-process inventories are used to adjust value added. In the shipbuilding and repairing industry, no inventory adjustment is made.)

“Value added” avoids the duplication in the value of shipments figure which results from the use of products of some establishments as materials by others. Value added is considered to be the best value measure available for comparing the relative economic importance of manufacturing among industries and geographic areas.

**Expenditures for Plant and Equipment**—Manufacturing establishments in operation and establishments under construction but not yet in operation, were asked to report their expenditures for (a) permanent additions and major alterations to the manufacturing establishment, and (b) new machinery and equipment used for replacement purposes and additions to plant capacity if they are of the type for which depreciation accounts are ordinarily maintained.

These totals exclude expenditures for new facilities and equipment leased from nonmanufacturing concerns; new facilities owned by the Federal Government but operated under contract by private companies; and plant and equipment furnished to the manufacturer by communities and nonprofit organizations. Expenditures for used plant and equipment (although reported in the census), expenditures for land, and cost of maintenance and repairs charged as current operating expense are also omitted from the figures for new capital expenditures.

**Central Administrative Offices and Auxiliary Units**—In the 1972 census as in previous years, respondents were asked to file separate reports for central administrative offices or auxiliary units which were (1) at different locations from the establishments served or, (2) at the same location as one of these establishments but were not operated as an integral part thereof and served two or more establishments. The functions of employees in central administrative offices include general company policy determination, planning and management (that is, company purchasing, accounting, general engineering, direction of company personnel matters, and legal and patent matters). Auxiliaries are storage facilities, garages, repair shops, purchasing offices, sales promotion offices, and research laboratories serving the plants or central management of the company.

**Standard Metropolitan Statistical Areas**—Standard metropolitan statistical areas (SMSA) are integrated economic and social units with a large volume of daily travel and communication between the central city and outlying parts of the area.<sup>1</sup> Each area (except in New England) consists of one whole county or more. An area may contain not only highly industrialized counties but also adjoining counties which, though primarily residential in character, contribute significantly to the industrial counties' labor force and are socially and economically integrated with the central city. These areas are defined by the Federal Committee on Standard Metropolitan Statistical Areas of the Office of Management and Budget for general-purpose use throughout the Federal Government in presenting economic and social data. In the New England States, similar intergration criteria are applied in defining

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<sup>1</sup> Each standard metropolitan statistical area must include either (1) a city with 50,000 or more inhabitants, or (2) a city having a population of at least 25,000 which (a) with the addition of the population of contiguous places has a population density of at least 1,000 persons per square mile; (b) constitutes, for general economic and social purposes, a single community with a combined population of at least 50,000; and (c) includes a total population of at least 75,000 in the county or counties in which the city and contiguous places are located.

SMSA's on a city and town basis because towns rather than counties are regarded as the significant unit in this region of the country.

The requirement that each SMSA consist of county units (except in New England) sometimes results in the inclusion in an area of considerable amount of territory which would not ordinarily be considered "metropolitan," much less "industrial." It is recognized that metropolitan areas could be more accurately defined in terms of smaller area segments such as minor civil

divisions, but the usefulness of areas so defined would be limited by the fact that many types of economic and social data are available only on a county basis.

Each SMSA is designated by the name of the principal city of the area. In addition to the name of the principal city, the area title may include one or two additional city names.

The data for SMSA's which changed definition since the 1967 census have not been retabulated on the new basis for years prior to 1972.

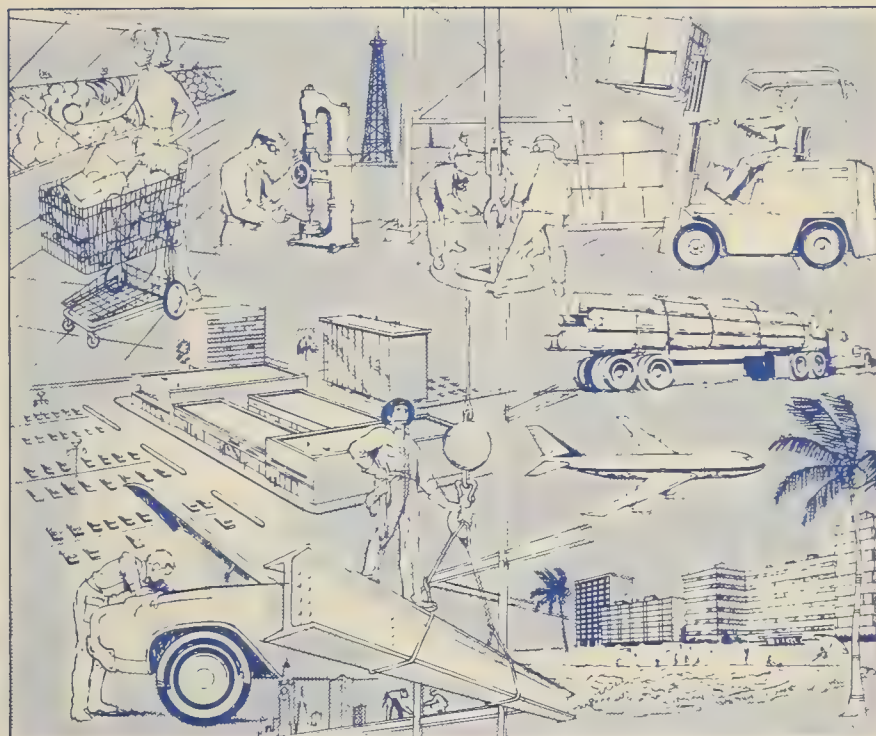


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# 1972 CENSUS OF MANUFACTURES

## AREA SERIES

MC72(P)-S43

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Issued April 1974

## Tennessee

Value added by manufacturing in 1972 in the State of Tennessee amounted to \$7,716 million, a 15-percent increase from 1971 and a 57-percent increase from 1967.

This report presents preliminary results from the 1972 Census of Manufactures for the State, its Standard Metropolitan Statistical Areas, and its counties.

Data are provided for industry groups within the State. Historical data, back to 1958, are included for the State as a whole,

and 1967 figures on employment and value added are provided for the smaller areas.

The figures in this report have been subjected to only preliminary review and must be regarded as approximations of the final census figures. No adjustments have been made in the value figures for changes in price level.

For an explanation of the terms used in the tables, see the appendix at the end of this report.

TABLE 1. General Statistics for the State: 1972 and Earlier Years

(See appendix, Explanation of Terms)

Year	Establishments		All employees <sup>1</sup>		Production workers			Value added by manufacture	Cost of materials <sup>2</sup>	Value of shipments <sup>2</sup>	Capital expenditures, new
	Total	With 20 employees or more	Number	Payroll	Number	Man-hours	Wages				
	(number)	(number)	(1,000)	(million dollars)	(1,000)	(millions)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(million dollars)
TENNESSEE											
1972 Census .....	5,680	2,345	466.7	3,344.9	364.8	721.6	2,287.5	7,715.7	8,748.2	16,158.2	533.2
1971 ASM .....	(NA)	(NA)	444.2	2,955.3	346.9	679.8	2,006.5	6,728.9	7,409.8	14,078.7	529.7
1970 ASM .....	(NA)	(NA)	447.9	2,785.5	348.2	682.4	1,886.2	6,297.0	6,858.5	12,982.6	507.7
1969 ASM .....	(NA)	(NA)	456.3	2,693.4	360.5	706.9	1,857.6	5,982.1	6,740.4	12,599.4	523.8
1968 ASM .....	(NA)	(NA)	434.1	2,445.4	345.1	682.4	1,696.4	5,542.0	6,328.9	11,771.7	481.3
1967 Census .....	5,040	2,022	418.0	2,190.0	333.6	654.7	1,512.2	4,921.1	5,848.0	10,700.1	412.4
1966 ASM .....	(NA)	(NA)	401.1	2,038.6	320.8	643.5	1,408.9	4,627.0	5,519.2	9,975.9	510.7
1965 ASM .....	(NA)	(NA)	373.4	1,809.2	299.2	599.1	1,257.5	4,139.4	4,841.5	8,878.0	389.7
1964 ASM .....	(NA)	(NA)	344.9	1,621.9	273.9	550.2	1,122.3	3,577.2	4,322.9	7,871.9	300.2
1963 Census .....	4,787	1,809	334.3	1,505.2	267.0	530.2	1,040.7	3,299.3	(NA)	(NA)	244.9
1962 ASM .....	(NA)	(NA)	314.4	1,385.7	250.0	500.5	954.3	3,016.6	(NA)	(NA)	194.3
1961 ASM .....	(NA)	(NA)	300.6	1,273.1	238.1	467.8	870.9	2,753.1	(NA)	(NA)	192.8
1960 ASM .....	(NA)	(NA)	303.0	1,244.1	241.5	470.2	855.5	2,566.6	(NA)	(NA)	212.8
1959 ASM .....	(NA)	(NA)	300.3	1,193.7	240.5	470.9	828.3	2,513.1	(NA)	(NA)	164.0
1958 Census .....	4,508	1,516	279.3	1,077.0	220.8	426.6	739.5	2,207.1	(NA)	(NA)	209.7

Note: "ASM" data are based on a representative sample of manufacturing establishments in the Annual Survey of Manufactures. These estimates may differ from the results of a complete canvass of all manufacturing establishments. The standard errors associated with these estimates are published in the annual survey of manufactures volumes for this period. For comparative purposes, the 1972 ASM estimate for the State of Tennessee was 464 thousand employees, and \$6,668 million in value added with corresponding standard error of estimate of 1 and 2.

(NA) Not available.

<sup>1</sup>Includes employment and payroll at central administrative offices and auxiliary units. (For a definition of these units, see appendix.)

<sup>2</sup>The total cost of materials and value of shipments may include extensive duplication arising from shipments between establishments in the same industry classification. (For a more complete explanation, see appendix.)

TABLE 2. General Statistics for the State, Standard Metropolitan Statistical Areas, and Counties: 1972 and 1967

(See appendix, Explanation of Terms)

State, standard metropolitan statistical areas, and counties <sup>1</sup>	1972										1967		
	Establishments		All employees <sup>2</sup>		Production workers			Value added by manu- facture	Cost of materials <sup>3</sup>	Value of shipments <sup>3</sup>	Capital expendi- tures, 1966-1971	All employees	Value added by manu- facture
	Total	With 20 employees or more	Number	Payroll	Number	Man-hours	Wages						
	(number)	(number)	(1,000)	(million dollars)	(1,000)	(million)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(1,000)	(million dollars)
TENNESSEE, TOTAL . . . . .	5 680	2 345	466.7	3 344.9	364.8	721.6	2 287.5	7 715.7	8 748.2	16 158.2	533.2	418.0	4 921.1
STANDARD METROPOLITAN STATISTICAL AREAS <sup>4</sup>													
CHATTANOOGA . . . . .	626	288	57.4	455.2	45.4	92.5	320.5	932.3	1 207.2	2 122.5	65.0	(D)	(D)
PORTION IN GEORGIA . . . . .	107	46	10.5	69.6	9.2	19.9	56.2	149.0	218.8	365.3	10.9	9.0	82.2
PORTION IN TENNESSEE . . . . .	519	242	46.9	385.6	36.2	72.6	264.3	783.3	988.4	1 757.2	54.1	(D)	(D)
KINGSPORT-BRISTOL . . . . .	225	91	32.9	300.9	23.9	48.4	190.2	649.7	703.0	1 352.0	59.3	32.7	486.9
PORTION IN VIRGINIA . . . . .	112	43	6.4	45.2	4.9	9.9	30.6	107.4	178.5	282.9	8.6	5.8	60.2
PORTION IN TENNESSEE . . . . .	123	53	26.5	255.7	19.0	38.5	159.6	542.3	524.5	1 069.1	50.7	26.9	426.7
KNOXVILLE . . . . .	452	167	40.7	323.4	30.9	61.1	217.6	947.8	894.4	1 841.2	62.5	38.9	518.4
MEMPHIS . . . . .	1 036	451	64.2	525.7	46.6	95.0	341.0	1 346.4	1 843.2	3 159.7	82.5	59.8	821.0
PORTION IN TENNESSEE . . . . .	954	411	59.8	495.4	43.4	88.6	322.3	1 271.4	1 765.7	3 016.5	74.6	56.9	791.2
PORTION IN MISSISSIPPI . . . . .	36	19	2.4	16.5	1.8	3.6	10.3	37.3	42.0	76.5	2.6	1.6	
PORTION IN ARKANSAS . . . . .	46	21	2.0	13.8	1.4	2.8	8.4	37.7	35.5	66.7	5.3	1.3	12.8
NASHVILLE-DAVIDSON . . . . .	1 110	415	72.5	554.6	52.6	103.7	342.5	1 160.1	1 326.8	2 466.2	96.0	63.7	747.7
COUNTIES													
BEDFORD . . . . .	58	26	4.2	24.8	3.6	7.3	15.4	73.6	98.5	161.0	4.5	3.5	28.9
BLED SOE . . . . .	16	2	1.3	1.3	1.3	1.6	1.2	2.5	3.4	5.8	.1	.5	2.2
BRADLEY . . . . .	106	48	11.9	75.0	9.4	19.2	54.0	173.0	195.6	370.3	22.1	8.9	92.7
CAMPBELL . . . . .	37	13	2.4	11.2	2.1	4.1	9.1	19.6	18.6	38.2	1.1	1.7	11.5
CARROLL . . . . .	26	10	1.8	9.3	1.6	3.1	8.2	17.3	23.2	40.8	.5	3.2	22.3
CARTER . . . . .	34	14	4.0	25.3	3.4	7.0	19.5	40.2	50.4	89.0	4.0	4.1	33.1
CHEATHAM . . . . .	14	7	1.9	14.3	1.6	3.1	11.0	35.1	44.2	77.7	2.5	(D)	(D)
CHESTER . . . . .	10	3	.9	4.5	.8	1.7	3.9	8.8	7.7	15.2	.8	(D)	(D)
COCKE . . . . .	38	20	3.4	21.0	2.9	5.8	15.6	49.4	65.3	114.1	3.1	3.0	29.8
COFFEE . . . . .	64	27	4.2	23.4	3.6	8.1	18.0	92.7	42.3	132.1	2.8	3.5	33.0
CUMBERLAND	42	13	2.2	12.5	1.7	3.1	8.5	33.7	34.7	68.0	1.3	1.8	23.1
DAVIDSON . . . . .	753	272	46.4	387.9	31.2	62.5	224.8	798.6	952.7	1 742.1	57.9	46.8	579.2
DECATUR . . . . .	21	5	1.8	8.7	1.7	3.1	7.3	11.4	4.1	16.8	.6	.8	4.0
DE KALB . . . . .	17	7	1.7	7.8	1.6	3.2	7.0	13.1	9.2	22.1	.5	1.5	9.4
DICKSON . . . . .	42	12	2.6	13.5	2.2	3.7	11.6	33.0	34.8	66.6	1.4	2.3	15.5
DYER . . . . .	37	13	4.2	28.8	3.6	7.3	21.6	71.8	61.6	131.4	6.2	3.7	46.4
FAYETTE . . . . .	11	7	1.5	7.9	1.3	3.0	6.9	15.5	21.4	36.1	1.2	1.1	9.7
FENTRESS . . . . .	23	6	1.4	5.7	1.3	2.5	5.3	7.9	11.3	19.1	.3	1.0	4.3
FRANKLIN . . . . .	26	8	1.3	7.8	1.2	2.3	6.6	22.0	14.3	35.0	1.2	1.8	15.3
GIBSON . . . . .	65	31	9.5	64.3	6.9	14.2	44.2	108.5	98.2	207.7	5.5	10.3	89.1
GILES . . . . .	31	17	3.4	20.3	3.0	6.1	16.8	63.5	55.3	126.2	.7	2.9	31.0
GRAINGER . . . . .	18	4	.5	2.6	.4	.9	2.0	5.7	8.3	13.8	.7	.2	1.7
GREENE . . . . .	63	30	8.3	51.9	6.5	12.7	33.7	235.4	238.0	491.8	8.4	7.0	158.1
GRUNDY . . . . .	23	4	.6	2.4	.6	1.1	2.1	3.2	1.6	4.9	.2	.7	2.4
HAMBLIN . . . . .	79	35	12.8	78.6	10.7	21.4	58.6	179.4	164.5	342.5	11.4	9.7	88.6
HAMILTON . . . . .	81	251	45.3	376.3	34.8	69.8	256.7	768.4	974.7	1 723.0	51.6	44.5	541.8
HARDMAN . . . . .	20	6	2.5	14.3	2.1	3.9	11.0	33.8	35.5	68.4	1.2	2.5	24.4
HARDIN . . . . .	37	11	2.2	12.9	1.8	3.5	9.7	32.0	31.2	61.0	1.6	1.8	21.9
HAWKINS . . . . .	13	7	3.7	35.4	3.0	6.0	26.3	53.5	66.5	112.7	(D)	1.7	24.0
HAYWOOD . . . . .	21	8	1.5	7.3	1.3	2.5	5.4	23.5	21.2	43.4	.8	1.3	11.4
HENDERSON . . . . .	25	10	2.4	11.6	2.2	4.3	10.5	32.7	27.7	55.3	2.0	2.4	17.5
HENRY . . . . .	38	17	4.1	27.2	3.5	6.9	21.4	55.0	66.9	121.5	3.4	2.3	23.5
HICKMAN . . . . .	16	7	1.3	6.9	1.1	2.1	5.9	16.3	13.1	28.8	1.4	1.3	9.9
HOUSTON . . . . .	13	3	.3	1.8	.3	.6	1.4	3.2	1.6	4.7	.1	.4	2.7
HUMPHREYS . . . . .	20	3	2.0	18.8	1.6	3.2	12.2	71.6	63.4	133.0	1.2	(D)	(D)
JACKSON . . . . .	6	3	.4	1.7	.4	.7	1.5	2.6	1.2	3.8	(D)	.6	2.4
JEFFERSON . . . . .	28	9	4.8	26.2	4.2	8.2	20.4	42.5	36.5	79.2	2.1	3.7	26.6
JOHNSON . . . . .	15	7	1.4	6.7	1.3	2.5	5.4	9.5	25.3	36.4	(D)	.9	3.7
KNOX . . . . .	136	51	26.3	177.4	20.7	41.1	123.0	366.9	540.0	798.6	16.5	25.5	268.9
LAKE . . . . .	8	5	.6	2.5	.4	.8	1.7	5.8	12.5	18.5	.2	.8	4.6
LAUDERDALE	27	12	2.2	11.2	2.0	4.2	9.0	63.1	17.7	81.6	1.5	1.3	10.4
LAWRENCE . . . . .	39	14	5.2	35.6	4.8	9.5	30.6	88.7	98.8	175.4	2.7	3.7	33.6
LINCOLN . . . . .	34	12	2.7	14.5	2.2	4.2	10.5	34.6	40.2	75.8	2.1	1.8	12.4
LOUDON . . . . .	31	15	3.7	22.5	3.1	5.8	17.4	57.1	43.4	97.4	2.6	3.1	35.1
MC MINN . . . . .	96	39	7.7	48.4	6.3	11.6	34.2	124.7	117.5	242.5	9.1	6.3	70.5
MC NARY . . . . .	32	11	2.9	15.9	2.6	5.3	13.7	38.5	31.8	69.0	1.7	1.9	14.3
MACON . . . . .	29	11	1.4	6.6	1.2	2.2	5.4	14.2	15.4	29.6	.8	1.2	10.1
MADISON . . . . .	103	48	7.3	56.5	5.5	11.5	36.9	105.4	158.2	257.1	15.0	4.9	44.9
MARION . . . . .	26	6	1.2	7.8	1.1	2.2	6.5	12.7	11.8	24.1	1.7	1.1	9.2
MARSHALL . . . . .	40	19	3.7	24.3	3.0	5.9	17.1	51.3	80.6	125.7	4.7	3.1	28.7
MAURY . . . . .	55	31	4.6	34.5	3.8	7.3	25.9	82.8	157.7	241.8	8.6	4.5	107.8
MEIGS . . . . .	11	3	.3	1.5	.3	.6	1.3	2.5	1.3	3.8	.1	.1	.3
MONROE . . . . .	50	14	1.5	7.5	1.3	2.6	6.0	13.4	9.8	23.3	.5	2.3	12.8
MONTGOMERY	60	27	6.3	40.4	4.4	8.0	27.0	77.4	160.7	232.0	7.3	4.0	49.7
OPION . . . . .	34	19	5.6	39.9	4.9	9.7	31.5	109.2	136.3	244.9	6.4	3.5	24.8
OVERTON . . . . .	25	11	1.7	6.7	1.4	2.8	5.2	15.1	14.0	26.0	.4	1.9	6.9
PERRY . . . . .	22	5	.9	4.2	.8	1.6	3.7	5.8	3.9	9.5	1.0	.5	2.2
PICKETT . . . . .	6	5	.5	2.1	.5	1.0	1.9	3.4	1.9	4.9	.4	(D)	(D)
PUTNAM . . . . .	31	14	4.4	26.3	3.6	6.9	18.5	56.5	48.0	102.2	2.8	3.7	25.7
RHEA . . . . .	41	16	3.6	18.4	3.1	5.9	13.8	42.8	55.3	97.5	5.5	2.5	21.6
ROANE . . . . .						8.2		114.8	76.2	193.4	1.5	7.3	105.4
ROBERTSON . . . . .	43	19	2.4	15.5	2.0	4.0	10.0	34.6	41.4	73.7	1.8	1.6	16.4
RUTHERFORD . . . . .	85	39	6.1	42.4	4.7	9.5	27.8	93.7	106.6	196.9	17.8	4.2	58.5
SCOTT . . . . .	25	7	1.0	5.5	.9	2.0	4.5	13.3	12.5	25.8	.6	.9	4.4
SEGUATCHIE . . . . .	12	5	.4	1.5	.3	.6	1.1	2.2	1.9	4.1	.8	(D)	(D)
SHAWNEE . . . . .						8.2		114.8	76.2	193.4	1.5	7.3	105.4
SHAWNEE . . . . .						8.2		114.8	76.2	193.4	1.5	7.3	105.4

See footnotes at end of table.



TABLE 2. General Statistics for the State, Standard Metropolitan Statistical Areas, and Counties: 1972 and 1967—Continued

(See appendix, Explanation of Terms)

State, standard metropolitan statistical areas, and counties <sup>1</sup>	1972											1967	
	Establishments		All employees <sup>2</sup>		Production workers			Value added by manufac- ture	Cost of materials <sup>3</sup>	Value of shipments <sup>3</sup>	Capital expendi- tures, new	All employees	Value added by manufac- ture
	Total	With 20 employees or more	Number	Payroll	Number	Man-hours	Wages						
	(number)	(number)	(1,000)	(million dollars)	(1,000)	(million)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(1,000)	(million dollars)
COUNTIES—CONTINUED													
SEVIER . . . . .	37	11	1.1	5.7	1.0	2.0	4.6	12.7	8.0	20.5	2.5	1.3	12.8
SHELBY . . . . .	929	400	58.1	484.0	42.1	85.6	314.4	1 249.5	1 715.9	2 943.8	73.7	56.0	783.6
SMITH . . . . .	12	6	1.2	5.4	1.1	2.1	4.6	15.2	12.4	27.0	1.3	.6	2.2
STEWART . . . . .	11	2	.4	1.7	.3	.6	1.3	3.0	1.5	4.4	.5	(D)	(D)
SULLIVAN . . . . .	110	46	22.8	220.3	16.0	32.5	133.3	488.8	458.0	956.4	(D)	25.2	402.7
SUMNER . . . . .	72	26	4.7	30.3	3.9	7.6	21.4	54.9	57.8	112.3	4.1	3.5	30.1
TIPTON . . . . .	25	11	1.7	11.4	1.3	3.0	7.9	21.9	49.8	72.7	.9	.9	7.6
TROUSDALE . . . . .	8	4	1.1	4.8	1.0	1.7	4.0	9.2	5.2	14.3	.1	.7	3.2
UNICOI . . . . .	24	8	1.7	10.8	1.4	2.8	7.7	20.3	11.4	31.5	.8	1.6	11.9
WARREN . . . . .	42	18	5.3	29.1	4.5	9.2	22.7	74.9	83.1	156.1	2.4	3.9	36.3
WASHINGTON . . . . .	90	44	10.6	62.7	8.3	16.3	43.9	132.1	118.0	247.1	6.8	7.0	66.1
WAYNE . . . . .	23	8	2.3	11.4	2.1	4.0	9.8	20.1	19.2	38.3	.5	1.7	13.3
WEAKLEY . . . . .	46	17	3.1	17.3	2.6	4.7	12.9	31.2	25.7	57.7	1.4	3.3	22.2
WHITE . . . . .	27	14	2.7	13.3	2.3	4.2	10.5	23.5	22.3	43.6	2.4	2.6	22.2
WILLIAMSON . . . . .	45	12	2.7	16.1	2.1	4.1	10.1	36.2	30.9	65.8	2.3	1.6	15.5
WILSON . . . . .	56	28	5.7	34.6	4.9	9.2	25.8	74.0	58.4	131.1	8.2	3.7	32.5

(NA) Not available. (D) Withheld to avoid disclosing figures for individual companies.

<sup>1</sup>Some counties were withheld from publication in order to (a) avoid disclosing figures for individual companies or (b) permit further checking of the figures for smaller counties. Additional detail will appear in the final report for this State.<sup>2</sup>Includes employment and payroll at central administrative offices and auxiliary units. (For a definition of these units, see appendix.)<sup>3</sup>The total cost of materials and value of shipments may include extensive duplication arising from shipments between establishments in the same industry classification. (For a more complete explanation, see appendix.)<sup>4</sup>The standard metropolitan statistical areas in this State are defined as follows:

CHATTANOOGA, TN-GA, SMSA: Consists of Hamilton, Marion, and Sequatchie Counties, TN, and Catoosa, Dade, and Walker Counties, GA.

KINGSPORT-BRISTOL, TN-VA, SMSA: Consists of Hawkins and Sullivan Counties, TN; and Bristol city, and Scott and Washington Counties, VA.

KNOXVILLE SMSA: Consists of Anderson, Blount, Knox, and Union Counties, TN.

MEMPHIS, TN-AR-MS, SMSA: Consists of Shelby and Tipton Counties, TN; Crittenden County, AR; and DeSoto County, MS.

NASHVILLE-DAVIDSON SMSA: Consists of Cheatham, Davidson, Dickson, Robertson, Rutherford, Sumner, Williamson, and Wilson Counties, TN.

TABLE 3. General Statistics for the State, by Industry Groups and Industries: 1972 and 1967

(See appendix, Explanation of Terms)

Code	Industry	1972										1967		
		Establishments		All employees		Production workers			Value added by manufacture	Cost of materials <sup>1</sup>	Value of shipments <sup>1</sup>	Capital expenditures, new	All employees	Value added by manufacture
		Total	With 20 employees or more	Number	Payroll	Number	Man-hours	Wages						
		(number)	(number)	(1,000)	(million dollars)	(1,000)	(million)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(1,000)	(million dollars)
	ALL INDUSTRIES, TOTAL <sup>2</sup> . . . . .	6 640	2 348	246.7	7 244.0	364.8	721.6	2 227.5	7 714.7	2 742.2	16 158.2	533.2	412.0	4 301.1
20	FOOD AND KINDRED PRODUCTS . . . . .	1 515	257	32.8	257.0	20.4	47.0	143.4	697.9	1 452.4	2 624.6	61.0	32.4	457.6
201	BEVERAGES, EXCEPT ALCOHOLIC . . . . .	162	14	6.7	57.7	5.0	11.3	33.1	117.0	598.2	110.8	11.3	6.5	72.3
2011	BEVERAGES, EXCEPT ALCOHOLIC . . . . .	67	12	5.1	46.9	3.7	8.2	24.1	86.1	508.3	590.2	6.7	4.9	59.0
2012	SAUSAGES AND OTHER PREPARED MEATS . . . . .	32	11	1.3	7.7	.6	1.2	4.3	20.2	69.4	88.1	4.5	.4	5.9
202	DAIRY PRODUCTS . . . . .	66	42	3.5	28.7	1.7	3.4	11.5	68.3	187.9	257.9	4.9	4.4	57.9
2021	CONDENSED AND EVAPORATED MILK . . . . .	11	6	.3	2.6	.2	.6	2.0	6.1	30.1	37.3	.2	.5	11.1
2022	ICE CREAM AND FROZEN DESSERTS . . . . .	16	11	.6	4.7	.2	.7	2.1	12.1	20.8	33.0	.5	1.1	14.4
2023	FLUID MILK . . . . .	25	20	2.1	18.5	.8	1.5	5.5	43.2	100.6	141.6	3.8	2.2	26.7
203	PRESERVED FRUITS AND VEGETABLES . . . . .	70	15	1.2	12.6	1.2	2.6	8.9	31.7	85.0	118.2	4.4	(NA)	(NA)
2033	CANNED FRUITS AND VEGETABLES . . . . .	10	4	.4	1.8	.2	.5	1.1	4.5	8.4	13.0	.2	.2	1.6
204	GRAIN MILL PRODUCTS . . . . .	21	20	3.3	26.6	2.2	5.0	17.8	111.7	254.0	362.0	3.7	3.4	28.9
2041	FLOUR AND OTHER GRAIN MILL PRODUCTS . . . . .	31	10	1.2	9.7	.8	1.9	6.3	42.3	94.7	133.6	1.5	EE	(D)
205	BAKERY PRODUCTS . . . . .	57	38	6.6	52.1	3.8	7.5	25.9	110.5	88.7	195.7	6.1	6.1	65.5
206	SUGAR AND CONFECTIONERY PRODUCTS . . . . .	16	6	1.2	8.2	1.1	2.0	5.8	20.6	19.0	40.1	.8	(NA)	(NA)
207	FATS AND OILS . . . . .	25	11	1.7	15.1	1.2	2.6	9.6	41.5	495.5	528.6	10.0	(NA)	(NA)
208	BEVERAGES, EXCEPT ALCOHOLIC . . . . .	81	57	4.3	37.5	1.8	3.8	11.9	145.0	147.0	284.5	10.2	4.4	71.2
209	MISC. FOODS AND KINDRED PRODUCTS . . . . .	71	18	2.5	18.5	1.7	3.6	10.8	51.6	77.1	126.8	9.5	(NA)	(NA)
2091	FOOD PREPARATIONS, NEC . . . . .	44	14	2.0	15.2	1.5	3.0	9.1	37.2	56.3	92.4	8.9	1.1	15.5
21	TOBACCO PRODUCTS . . . . .	11	10	1.1	6.2	.8	1.6	4.0	27.7	42.2	71.1	.6	1.0	14.5
22	TEXTILE MILL PRODUCTS . . . . .	169	122	32.8	186.4	29.0	53.0	148.4	342.5	543.7	885.6	22.1	31.2	254.6
221	KNITTING MILLS . . . . .	81	63	16.6	82.1	14.8	27.5	65.2	145.4	201.6	345.0	7.6	16.8	112.7
2251	WOMEN'S HOSIERY, EXCEPT SOCKS . . . . .	19	15	4.9	22.9	4.3	7.5	17.8	38.2	61.6	102.6	.7	5.5	38.4
2252	HOSIERY, NEC . . . . .	40	29	4.4	20.4	3.9	7.4	16.1	32.9	38.5	71.1	1.5	5.7	38.9
227	TEXTILE FINISHING, EXCEPT WOOL . . . . .	14	8	1.3	8.2	1.2	2.5	7.0	17.6	63.3	82.5	1.3	2.4	25.1
2271	FLOOR COVERING MILLS . . . . .	10	8	1.6	10.5	1.3	2.9	7.4	24.1	50.5	74.2	.5	CC	(D)
2272	MISCELLANEOUS TEXTILE GOODS . . . . .	23	17	1.9	13.5	1.6	3.6	11.2	32.8	69.9	102.5	1.4	2.3	26.3
23	APPAREL, OTHER TEXTILE PRODUCTS . . . . .	349	263	67.0	297.9	60.2	111.7	247.6	586.3	550.7	1 121.1	14.9	68.1	412.5
232	MEN'S AND BOYS' FURNISHINGS . . . . .	146	140	41.9	179.5	38.0	71.7	153.8	365.3	375.0	729.1	9.8	41.6	225.9
2321	MEN'S AND BOYS' SHIRTS AND NIGHTWEAR . . . . .	47	47	14.4	59.7	13.1	24.8	51.1	113.6	109.3	219.2	3.0	14.9	70.7
2327	MEN'S AND BOYS' SEPARATE TROUSERS . . . . .	27	26	8.4	38.6	7.8	15.3	33.7	82.1	74.6	155.2	2.2	8.2	54.2
2328	MEN'S AND BOYS' WORK CLOTHING . . . . .	53	52	16.0	67.9	14.5	26.8	58.8	144.7	165.3	307.0	3.8	12.1	63.6
233	WOMEN'S, AND MISSES' OUTERWEAR . . . . .	72	48	9.4	39.7	8.5	14.8	33.2	69.3	52.5	120.1	1.2	9.6	64.6
2331	WOMEN'S, MISSES' BLOUSES, WAISTS . . . . .	14	12	1.7	6.5	1.6	2.8	5.5	10.4	3.8	14.1	(D)	FF	(D)
2332	WOMEN'S AND MISSES' DRESSES . . . . .	31	16	3.1	13.8	2.9	4.7	11.9	21.0	7.2	27.8	.2	FF	(D)
234	WOMEN'S, CHILDREN'S UNDERGARMENTS . . . . .	9	8	2.4	11.2	2.1	3.7	8.4	24.4	17.4	41.3	.3	2.6	17.5
236	CHILDREN'S OUTERWEAR . . . . .	9	6	1.2	4.8	1.1	1.8	3.9	8.1	4.0	11.7	.1	EE	(D)
238	MISC. APPAREL AND ACCESSORIES . . . . .	15	12	1.7	6.6	1.5	2.9	5.6	10.5	6.9	17.2	.3	FF	(D)
2381	FABRIC DRESS AND WORK GLOVES . . . . .	7	6	.9	3.4	.8	1.5	2.9	5.6	5.3	10.9	(2)	1.1	6.5
239	MISC. FABRICATED TEXTILE PRODUCTS . . . . .	70	27	4.9	29.5	4.2	8.4	21.1	59.3	69.7	127.7	2.3	4.7	50.1
2391	CURTAINS AND DRAPERIES . . . . .	14	5	.4	1.8	.3	.6	1.5	2.4	2.7	4.7	(2)	EE	(D)
2392	HOUSE FURNISHINGS, NEC . . . . .	16	5	.7	4.6	.5	1.0	1.3	8.6	5.9	14.3	.1	CC	(D)
2393	FABRICATED TEXTILE PRODUCTS, NEC . . . . .	21	9	2.9	17.0	2.5	5.1	14.2	34.9	34.6	69.3	1.4	1.6	23.3
24	LUMBER AND WOOD PRODUCTS . . . . .	916	177	15.9	89.3	13.7	26.6	68.2	171.2	232.8	404.4	11.0	(NA)	(NA)
242	SAWMILLS AND PLANING MILLS . . . . .	505	82	7.7	41.5	6.9	13.6	33.6	72.6	89.7	163.2	5.2	9.0	56.3
2421	SAWMILLS AND PLANING MILLS, GENERAL . . . . .	420	39	3.1	16.5	2.7	5.2	13.5	36.4	37.9	74.8	3.2	4.2	29.9
2426	HARDWOOD DIMENSION AND FLOORING . . . . .	73	39	4.4	23.4	3.9	8.1	19.0	33.9	47.6	82.5	1.7	(NA)	(NA)
243	MILLWORK, PLYWOOD, STRUC. MEMBERS . . . . .	104	37	2.9	17.9	2.4	4.7	12.1	37.3	62.7	97.8	1.4	(NA)	(NA)
2431	MILLWORK . . . . .	41	12	1.2	7.1	.9	1.7	4.7	13.8	19.7	32.7	.3	(NA)	(NA)
2435	HARDWOOD VENEER AND PLYWOOD . . . . .	10	10	.9	5.2	.7	1.4	3.3	14.0	36.7	49.5	.6	(NA)	(NA)
244	WOOD CONTAINERS, NEC . . . . .	10	5	.7	4.4	.6	1.2	3.3	6.7	9.4	16.3	.2	(NA)	(NA)
245	WOOD BUILDINGS AND MOBILE HOMES . . . . .	17	12	1.3	8.7	1.1	1.8	5.9	23.7	35.7	60.0	2.2	(NA)	(NA)
2451	MISCELLANEOUS WOOD PRODUCTS . . . . .	81	28	2.1	11.5	1.7	3.4	8.9	21.6	26.0	48.4	1.3	(NA)	(NA)
25	FURNITURE AND FIXTURES . . . . .	289	139	26.7	151.5	22.9	44.0	113.2	291.2	356.7	543.3	15.0	21.9	167.5
251	HOUSEHOLD FURNITURE . . . . .	216	111	23.2	129.6	19.9	38.3	97.5	242.7	308.4	447.1	12.8	(NA)	(NA)
2512	UPHOLSTERED HOUSEHOLD FURNITURE . . . . .	94	58	8.6	46.8	7.6	14.5	37.1	90.3	182.6	171.1	3.8	(NA)	(NA)
2514	METAL HOUSEHOLD FURNITURE . . . . .	10	6	2.0	12.3	1.5	2.7	7.6	22.8	20.2	42.2	1.4	EE	(D)
2515	MATTRESSES AND BEDSPRINGS . . . . .	22	12	1.7	11.5	1.2	2.5	6.1	21.2	24.8	45.9	1.2	EE	(D)
254	PARTITIONS AND FIXTURES . . . . .	38	11	1.5	9.2	1.3	2.4	6.6	20.0	25.0	44.6	.6	1.0	13.2
2541	WOOD PARTITIONS AND FIXTURES . . . . .	30	8	1.0	6.1	.9	1.6	4.4	12.2	16.4	28.4	.3	CC	(D)
2542	METAL PARTITIONS AND FIXTURES . . . . .	8	3	.5	3.1	.4	.8	2.2	7.8	8.6	16.1	.3	BB	(D)
259	MISC. FURNITURE AND FIXTURES . . . . .	15	6	1.0	6.0	.9	1.7	4.9	13.3	9.6	22.2	1.1	.2	3.4
26	PAPER AND ALLIED PRODUCTS . . . . .	120	98	16.3	141.6	12.8	27.2	100.4	358.5	393.9	750.6	26.9	12.4	218.1
264	MISC. CONVERTED PAPER PRODUCTS . . . . .	39	29	6.3	47.5	5.1	10.9	34.7	149.2	143.8	290.1	15.2	3.6	69.0
2641	PAPER COATING AND GLAZING . . . . .	8	5	.6	4.2	.3	1.0	3.0	12.1	15.0	26.3	.6	(NA)	(NA)
2642	BAGS, EXCEPT TEXTILE BAGS . . . . .	10	9	1.3	9.0	1.1	2.4	6.8	19.0	30.1	49.1	1.5	EE	(D)
2648	STATIONERY PRODUCTS . . . . .	6	4	.5	3.1	.4	.7	2.1	5.7	5.3	11.0	.4	(NA)	(NA)
265	PAPERBOARD CONTAINERS AND BOXES . . . . .	65	54	5.3	40.6	4.3	8.8	28.7	70.3	107.5	177.5	9.8	3.9	42.0
2651	FOLDING PAPERBOARD BOXES . . . . .	11	9	.9	6.7	.7	1.5	5.0	11.7	11.2	22.9	.4	.6	6.9
2652	CORRUGATED AND SOLID FIBER BOXES . . . . .	32	28	3.2	29.8	2.5	5.2	17.1	43.7	70.9	114.6	3.9	2.4	24.7
2653	FIBER CANS, DRUMS, SIMILAR PRODUCTS . . . . .	9	7	.8	5.6	.7	1.4	4.5	10.2	19.4	29.3	1.2	.4	5.6

See footnotes at end of table.



TABLE 3. General Statistics for the State, by Industry Groups and Industries: 1972 and 1967—Continued

(See appendix, Explanation of Terms)

Code	Industry	1972											1967	
		Establishments		All employees		Production workers			Value added by manufacture	Cost of materials <sup>1</sup>	Value of shipments <sup>1</sup>	Capital expenditures, new	All employees	Value added by manufacture
		Total	With 20 employees or more	Number	Payroll	Number	Man-hours	Wages						
		(number)	(number)	(1,000)	(million dollars)	(1,000)	(million)	(million dollars)					(1,000)	(million dollars)
27	PRINTING AND PUBLISHING. . . . .	711	134	19.3	155.9	12.2	23.8	91.1	280.4	156.7	435.0	16.7	17.5	186.1
2711	NEWSPAPERS. . . . .	148	33	5.7	44.7	2.9	5.2	21.4	91.5	34.7	125.9	6.2	5.5	59.2
2721	PERIODICALS. . . . .	39	11	2.6	18.4	.8	1.3	4.7	36.5	16.0	51.1	1.3	1.7	18.1
273	BOOKS. . . . .	23	9	3.1	27.2	2.3	4.9	17.6	35.1	32.7	69.2	1.3	3.6	36.4
2741	MISCELLANEOUS PUBLISHING. . . . .	76	4	.5	3.6	.4	.6	1.8	8.1	2.1	10.1	(D)	.3	2.9
275	COMMERCIAL PRINTING. . . . .	349	54	5.5	47.8	4.4	8.9	35.1	85.3	61.5	145.6	5.9	(NA)	(NA)
2752	COMMERCIAL PRINTING, LITHOGRAPHIC. .	117	32	2.4	20.4	1.8	3.6	14.0	33.5	23.8	56.2	2.0	(NA)	(NA)
2761	MANIFOLD BUSINESS FORMS. . . . .	15	4	.4	2.8	.3	.6	1.9	3.7	4.1	7.8	(D)	(NA)	(NA)
278	BLANKBOOKS AND BOOKBINDING. . . . .	11	6	.5	2.8	.4	.8	2.2	5.5	2.2	7.6	.6	.3	2.5
2791	TYPESETTING. . . . .	33	6	.3	3.1	.3	.5	2.5	4.6	1.0	5.5	.3	.4	3.7
28	CHEMICALS AND ALLIED PRODUCTS. .	214	100	50.4	505.5	33.4	66.3	291.4	1 425.0	1 034.8	2 409.5	100.4	52.1	1 155.5
281	INDUSTRIAL INORGANIC CHEMICALS. .	34	16	12.1	131.2	6.9	14.0	65.4	458.1	160.6	617.1	22.8	(NA)	(NA)
282	PLASTICS MATERIALS AND SYNTHETICS. .	15	14	21.3	208.4	15.5	30.1	130.9	447.8	428.4	872.1	44.0	(NA)	(NA)
283	DRUGS. . . . .	16	8	3.4	27.8	1.7	3.6	11.5	112.5	31.0	141.0	1.7	2.7	73.8
2834	PHARMACEUTICAL PREPARATIONS. . . . .	15	7	3.3	27.3	1.7	3.6	11.3	111.2	30.8	139.4	1.7	FF	(D)
284	SOAPS, CLEANERS, AND TOILET GOODS. .	46	14	1.3	9.4	.8	1.5	4.1	79.1	36.6	82.9	.8	(NA)	(NA)
2844	TOILET PREPARATIONS. . . . .	13	6	.7	4.7	.5	.9	2.4	30.6	12.0	43.7	.4	CC	(D)
286	INDUSTRIAL ORGANIC CHEMICALS. . . . .	19	11	6.0	69.2	3.9	8.0	39.3	204.6	212.2	416.1	25.8	(NA)	(NA)
287	AGRICULTURAL CHEMICALS. . . . .	25	18	1.7	14.7	1.2	2.6	9.3	49.1	60.2	108.5	2.2	(NA)	(NA)
2875	FERTILIZERS, MIXING ONLY. . . . .	10	7	.3	2.0	.2	.3	.9	6.6	14.0	20.3	.3	.2	2.7
2879	AGRICULTURAL CHEMICALS. . . . .	9	5	.5	3.8	.3	.7	2.1	13.3	16.5	28.2	.9	(NA)	(NA)
289	MISCELLANEOUS CHEMICAL PRODUCTS. .	39	11	4.0	40.4	3.0	5.8	28.9	62.2	81.0	134.2	2.6	(NA)	(NA)
29	PETROLEUM AND COAL PRODUCTS. . .	40	10	1.0	8.2	.7	1.5	5.3	20.4	72.3	92.1	1.5	.7	11.3
295	PAVING AND ROOFING MATERIALS. . . . .	33	6	.5	4.3	.4	.9	2.8	12.5	21.9	34.0	1.3	BB	(D)
2952	ASPHALT FELTS AND COATINGS. . . . .	6	4	.3	2.5	.2	.6	1.8	5.0	9.0	13.5	.5	AA	(D)
30	RUBBER AND MISC. PLASTICS PROD. .	133	72	17.0	141.3	14.1	28.7	107.3	425.0	331.0	749.4	38.6	(NA)	(NA)
3011	TIRES AND INNER TUBES. . . . .	10	7	5.4	59.5	4.3	9.2	46.7	178.7	129.9	304.4	18.9	FF	(D)
3079	MISCELLANEOUS PLASTICS PRODUCTS. . .	102	46	7.0	49.4	5.9	11.6	37.0	181.1	122.8	302.9	16.8	(NA)	(NA)
31	LEATHER AND LEATHER PRODUCTS. . .	87	67	19.5	111.1	17.6	34.4	92.4	223.5	222.3	433.6	5.4	16.9	142.5
3111	LEATHER TANNING AND FINISHING. . . . .	8	7	.9	5.7	.7	1.4	4.4	13.8	45.5	59.1	(D)	CC	(D)
314	FOOTWEAR, EXCEPT RUBBER. . . . .	39	39	16.0	92.7	14.6	28.5	78.1	185.7	147.4	323.6	3.7	13.4	112.4
32	STONE, CLAY, AND GLASS PRODUCTS. .	311	118	14.9	128.8	12.0	25.0	95.7	336.8	225.7	557.4	41.3	14.4	195.5
322	GLASS, GLASSWARE, PRESSED OR BLOWN	6	3	1.8	16.8	1.5	3.5	12.9	39.1	23.3	62.4	3.9	EE	(D)
3241	CEMENT, HYDRAULIC. . . . .	7	6	.8	9.2	.7	1.5	7.9	30.3	14.4	45.0	3.4	.8	21.8
325	STRUCTURAL CLAY PRODUCTS. . . . .	10	9	1.0	6.2	.8	1.7	5.0	17.3	7.5	25.0	1.0	1.1	12.4
327	CONCRETE, GYPSUM, PLASTER PRODUCTS	211	71	4.0	27.5	2.9	6.0	17.5	67.5	65.4	132.0	8.3	3.9	44.7
3272	CONCRETE PRODUCTS, NEC. . . . .	69	26	1.5	10.0	1.2	2.7	7.0	20.5	16.1	36.1	2.0	EE	(D)
3273	READY-MIXED CONCRETE. . . . .	93	30	1.6	11.5	1.0	2.1	7.0	33.7	34.7	68.2	5.1	1.7	23.1
3281	CUT STONE AND STONE PRODUCTS. . . . .	25	3	.4	2.0	.3	.6	1.5	3.4	2.6	6.0	(D)	CC	(D)
329	MISC. NONMETALLIC MINERAL PRODUCTS	29	11	1.1	7.1	.9	1.7	4.8	20.4	13.9	34.0	1.4	(NA)	(NA)
33	PRIMARY METAL INDUSTRIES. . . . .	99	69	17.4	156.8	14.6	29.9	123.6	276.0	477.2	758.2	53.5	16.3	225.2
331	BLAST FURNACE, BASIC STEEL PROD. .	17	16	3.6	28.6	2.9	6.0	21.6	50.5	67.6	119.5	6.8	2.4	30.9
3313	ELECTROMETALLURGICAL PRODUCTS. . . .	3	3	.7	6.4	.6	1.2	4.9	12.8	19.1	35.0	(D)	CC	(D)
3315	STEEL WIRE AND RELATED PRODUCTS. . .	4	4	.8	6.7	.7	1.4	4.3	11.8	19.7	31.2	.8	(NA)	(NA)
332	IRON AND STEEL FOUNDRIES. . . . .	20	21	5.0	38.4	4.2	8.9	30.3	66.3	53.4	118.0	(D)	4.0	34.7
335	NONFERROUS ROLLING AND DRAWING. . .	13	11	5.7	58.3	4.9	9.9	48.3	78.9	255.3	341.0	9.8	6.1	90.6
339	MISC. PRIMARY METAL PRODUCTS. . . . .	13	5	.3	2.5	.2	.5	1.9	7.3	11.2	19.0	.4	(NA)	(NA)
34	FABRICATED METAL PRODUCTS. . . . .	412	176	30.7	235.5	23.6	46.9	163.3	443.3	417.4	858.5	26.1	(NA)	(NA)
341	METAL CANS AND SHIPPING CONTAINERS	13	5	.5	4.8	.4	.9	3.4	18.3	18.0	35.3	2.3	(NA)	(NA)
3411	METAL CANS. . . . .	9	4	.4	4.0	.3	.7	2.9	16.9	15.8	31.7	2.3	.2	3.8
342	CUTLERY, HANDTOOLS AND HARDWARE. .	18	13	3.0	22.0	2.2	4.4	14.2	48.2	21.3	68.6	(D)	3.7	34.4
343	PLUMBING, HEATING, EXC. ELECTRIC. .	11	9	2.1	15.1	1.7	3.4	11.1	23.3	28.8	49.7	1.8	(NA)	(NA)
344	FABRICATED STRUCTURAL METAL PROD. .	211	83	12.0	104.9	8.9	17.4	68.9	190.1	210.4	406.4	8.0	11.2	112.0
3441	FABRICATED STRUCTURAL METAL PRODUCTS	46	26	1.9	16.1	1.5	2.9	10.3	26.4	40.1	68.0	1.0	2.2	28.8

See footnotes at end of table.

TABLE 3. General Statistics for the State, by Industry Groups and Industries: 1972 and 1967—Continued  
(See appendix, Explanation of Terms)

Code	Industry	1972											1967	
		Establishments		All employees		Production workers			Value added by manufacture	Cost of materials <sup>1</sup>	Value of shipments <sup>1</sup>	Capital expenditures, new	All employees	Value added by manufacture
		Total (number)	With 20 employees or more (number)	Number (1,000)	Payroll (million dollars)	Number (1,000)	Man-hours (million)	Wages (million dollars)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(1,000)	(million dollars)
3442	METAL COFFERS, CASKS, AND TRIMS . . . . .	32	14	1.3	8.3	1.1	2.1	6.0	14.4	20.1	33.9	.5	.8	7.2
3447	FABRICATED PLATEWORK (BOILER SHOTS) . . . . .	25	18	6.8	66.0	4.9	9.6	44.1	122.1	111.9	239.7	4.7	6.1	52.5
3444	SHEET METALWORK . . . . .	49	7	.5	4.3	.4	.8	2.7	8.4	9.7	17.9	.4	.7	9.1
3446	ARCHITECTURAL METALWORK . . . . .	39	7	.6	4.5	.5	.9	2.8	8.2	9.0	17.0	.7	.6	6.9
345	SCREW MACHINE PRODUCTS, BOLTS, ETC . . . . .	15	9	.7	4.3	.5	1.3	3.8	11.4	7.2	17.9	.4	.3	3.7
3452	BOLTS, NUTS, RIVETS, AND WASHERS . . . . .	8	4	.4	3.0	.4	.8	2.4	7.5	5.7	12.5	.2	(NA)	(NA)
346	METAL FORGINGS AND STAMPINGS . . . . .	31	10	2.0	13.7	1.8	3.8	10.5	26.2	29.5	55.0	4.1	(NA)	(NA)
3464	METAL STAMPINGS, NEC . . . . .	26	5	1.3	8.0	1.1	2.5	6.3	15.7	17.3	32.5	2.8	(NA)	(NA)
347	METAL SERVICES, NEC . . . . .	47	11	.8	4.8	.7	1.4	3.5	8.4	3.0	11.4	(0)	.9	6.3
3471	PLATING AND POLISHING . . . . .	36	10	.7	4.4	.6	1.3	3.2	7.6	2.4	10.1	(0)	.8	5.6
348	ORDNANCE AND ACCESSORIES, NEC . . . . .	7	5	3.6	24.3	2.4	4.8	17.0	30.3	25.8	55.2	.4	(NA)	(NA)
3483	AMMUNITION, EXC. FOR SMALL ARMS, NEC . . . . .	4	4	3.4	23.1	2.2	4.5	16.2	29.5	24.0	52.7	(0)	(NA)	(NA)
349	MISC. FABRICATED METAL PRODUCTS . . . . .	63	35	6.0	41.0	5.0	9.6	30.9	87.0	73.5	159.0	6.4	(NA)	(NA)
3494	VALVES AND PIPE FITTING . . . . .	8	7	1.9	15.7	1.5	3.0	12.1	38.9	28.0	67.5	1.9	EE	(0)
3496	MISC. FABRICATED WIRE PRODUCTS . . . . .	23	14	1.0	5.9	.9	1.6	4.6	13.2	11.3	23.9	1.6	(NA)	(NA)
35	MACHINERY, EXCEPT ELECTRICAL . . . . .	469	138	27.2	225.9	21.1	41.9	158.6	546.7	484.5	1 005.4	26.4	16.0	198.8
352	FARM AND GARDEN MACHINERY . . . . .	20	7	3.1	38.5	2.5	5.0	28.7	62.6	54.5	116.6	(0)	(NA)	(NA)
353	CONSTRUCTION AND RELATED MACHINERY . . . . .	24	14	1.9	14.8	1.4	2.9	10.3	37.0	29.1	65.0	1.5	1.7	26.0
3535	CONVEYORS AND CONVEYING EQUIPMENT . . . . .	5	3	.3	1.9	.2	.3	1.2	4.5	2.9	7.1	.1	BB	(0)
3544	SPECIAL DIES, TOOLS, JIGS & FIXTURES . . . . .	80	22	.9	8.9	.7	1.6	6.4	13.5	5.1	18.6	.9	EE	(0)
355	SPECIAL INDUSTRY MACHINERY . . . . .	44	17	2.2	17.8	1.6	3.4	11.7	38.0	43.1	80.8	1.3	EE	(0)
3552	TEXTILE MACHINERY . . . . .	2	6	.9	7.8	.7	1.5	5.5	12.7	11.7	24.3	.3	.7	9.8
356	GENERAL INDUSTRIAL MACHINERY . . . . .	42	19	2.2	22.7	2.2	4.3	14.8	45.3	43.3	85.3	2.7	1.8	17.6
3564	BLOWERS AND FANS . . . . .	10	6	.4	3.6	.2	.4	1.4	6.2	6.8	13.9	.2	.2	1.8
3569	GENERAL INDUSTRIAL MACHINERY, NEC . . . . .	9	5	.7	5.2	.5	1.0	3.2	9.9	6.0	15.7	.6	CC	(0)
359	REFRIGERATION, SERVICE MACHINERY . . . . .	29	20	7.8	54.9	6.1	11.3	38.5	154.5	221.8	357.3	11.4	2.0	33.0
360	MISC. MACHINERY, EXCEPT ELECTRICAL . . . . .	205	29	4.7	39.7	3.9	8.1	30.1	66.4	36.6	98.8	3.3	(NA)	(NA)
36	ELECTRIC, ELECTRONIC EQUIPMENT . . . . .	174	24	34.0	228.9	27.9	55.9	163.9	684.1	722.0	1 366.2	40.7	(NA)	(NA)
362	ELECTRICAL INDUSTRIAL APPARATUS . . . . .	18	12	6.0	36.2	5.2	10.7	28.2	84.7	109.4	188.5	9.5	FF	(0)
3622	HOUSEHOLD APPLIANCES . . . . .	34	29	10.9	73.2	9.1	18.2	54.2	185.3	246.8	427.9	13.9	FF	(0)
364	ELECT. LIGHTING AND WIRING EQUIP. . . . .	18	12	3.6	25.3	3.1	6.2	19.5	77.3	43.0	120.1	2.2	2.9	54.2
3644	NONCURRENT-CARRYING WIRING DEVICES . . . . .	4	3	.6	4.0	.5	1.0	2.8	10.4	7.2	17.4	.5	BB	(0)
366	COMMUNICATION EQUIPMENT . . . . .	18	5	5.8	44.3	4.2	8.6	27.9	95.4	48.7	145.4	5.4	FF	(0)
369	MISC. ELECTRICAL EQUIP., SUPPLIES . . . . .	18	8	1.2	8.3	1.1	2.1	6.7	21.3	22.2	42.8	1.4	.9	13.1
3691	STORAGE BATTERIES . . . . .	6	3	.3	2.7	.3	.6	2.3	7.5	12.2	19.1	.2	BB	(0)
37	TRANSPORTATION EQUIPMENT . . . . .	159	73	20.6	149.6	17.0	33.5	114.0	352.1	381.3	721.0	24.0	(NA)	(NA)
371	MOTOR VEHICLES AND EQUIPMENT . . . . .	66	39	10.5	71.8	8.7	17.2	56.4	202.0	209.1	401.4	17.7	6.3	76.1
3714	MOTOR VEHICLE PARTS AND ACCESSORIES . . . . .	41	29	8.6	56.4	7.2	14.2	45.2	168.6	130.8	290.4	13.8	FF	(0)
3719	TRUCK TRAILERS . . . . .	4	3	.8	7.0	.7	1.4	5.1	12.5	28.5	40.2	.6	BB	(0)
373	SHIP, BOAT BUILDING, REPAIRING . . . . .	57	17	2.6	16.9	2.1	4.0	13.0	32.6	33.3	64.9	1.4	EE	(0)
379	MISC. TRANSPORTATION EQUIPMENT . . . . .	29	12	1.2	7.2	1.0	1.8	5.3	12.7	24.4	37.9	.8	(NA)	(NA)
38	INSTRUMENTS AND RELATED PRODUCTS . . . . .	45	14	2.8	19.3	2.0	4.0	11.2	48.4	26.5	73.8	1.7	(NA)	(NA)
3829	MEASURING, CONTROLLING DEVICES, NEC . . . . .	9	3	.4	2.3	.3	.5	1.1	4.4	2.5	6.8	.1	(NA)	(NA)
384	MEDICAL INSTRUMENTS AND SUPPLIES . . . . .	18	6	1.1	8.1	.9	1.8	5.4	21.5	11.8	33.1	1.1	EE	(0)
39	MISC. MANUFACTURING INDUSTRIES . . . . .	225	77	10.1	58.3	8.4	17.0	43.5	178.7	124.1	297.4	5.4	8.6	77.2
394	TOYS AND SPORTING GOODS . . . . .	49	18	2.1	10.5	1.9	4.4	8.6	30.1	23.4	50.9	.8	2.3	18.6
3942	SPORTING AND ATHLETIC GOODS, NEC . . . . .	24	13	1.6	7.9	1.4	3.6	6.7	23.9	17.6	38.7	.5	1.6	15.6
395	PENS, PENCILS, OFFICE, ART GOODS . . . . .	29	13	2.4	12.6	2.0	3.9	8.8	31.7	32.8	63.7	(0)	2.2	19.4
3952	MISCELLANEOUS MANUFACTURES . . . . .	126	40	4.1	26.1	3.2	6.1	18.1	95.7	50.3	140.5	2.0	3.1	29.7
3954	BRUSHES . . . . .	12	5	.6	2.9	.5	.9	2.3	7.1	7.5	14.3	.2	.3	2.0
3957	SIGNS AND ADVERTISING DISPLAYS . . . . .	77	18	2.0	14.1	1.5	2.7	9.1	30.6	24.0	53.0	1.1	1.7	19.7
3999	MANUFACTURING INDUSTRIES, NEC . . . . .	23	4	.4	2.4	.4	.7	1.8	4.3	2.9	7.2	.2	.4	2.7
--	ADMINISTRATIVE AND AUXILIARY . . . . .	130	63	8.9	87.9	-	-	-	-	-	-	-	5.2	-

Note: The following symbols indicate employment size range for 1967:

AA less than 250 employees      EE 1,000 to 2,499 employees  
BB 250 to 499 employees      FF 2,500 employees and over  
CC 500 to 999 employees

- Represents zero. (NA) Not available. Because of a revision to this industry or industry group in the 1972 edition of the SIC manual, 1967 census data are not available on a comparable basis. (0) Withheld to avoid disclosing figures for individual companies. (2) Less than half the unit of measurement shown.

<sup>1</sup>The total cost of materials and value of shipments for industry groups shown may include extensive duplication arising from shipments between establishments in the same industry classification. (For a more complete explanation, see appendix.)

<sup>2</sup>Includes figures for industry groups which have been withheld from publication in order to (a) avoid disclosing figures for individual companies or (b) permit further checking of figures for smaller industry groups. Additional detail will appear in the final report for this State.



## Appendix A. SCOPE AND COVERAGE

This report is one of a series presenting preliminary information, by State, from the 1972 Census of Manufactures. The data will be superseded in a final report which, in turn, will be included in *Volume III, Area Statistics, 1972 Census of Manufactures*. The final report will include a comprehensive discussion of the concepts and definitions used in the census.

The census of manufactures covers each manufacturing establishment in the United States with one paid employee or more; manufacturing establishments with no employees are excluded. Firms which operated more than one establishment were required to file a separate report for each location. Companies which engaged in distinctly different lines of activity at one location were asked to submit separate reports if the company records permitted such a separation and the activities were of significant size.

This report includes figures for administrative offices, warehouses, garages, or other auxiliary units which service manufacturing establishments.

In the 1972 census, the approximately 120,000 manufacturing establishments with fewer than 10 employees were excused from filing reports. Under special arrangements which safeguarded the confidentiality of both tax and census records, data on payrolls, sales, and industry classification from the administrative records of the Social Security Administration and the Internal Revenue Service were made available to the Census Bureau for use in the 1972 Economic Censuses (retail and wholesale trade, service industries, construction industries, manufactures, and mineral industries). Estimates for data other than payrolls and sales for these small establishments were constructed from industry averages. The effect on industry aggregates is slight in most industries. For manufacturing as a whole, these small establishments account for less than 3 percent of the payrolls and value added.

Establishments are classified by industry in accordance with industry definitions described in the 1972 edition of the Standard Industrial Classification (SIC) Manual. For 1972, the SIC was significantly revised and the comparability with prior year's data for some industries was significantly affected. The comparability at the 2- and 3-digit SIC levels was less affected. The final volumes of the 1972 Census of Manufactures will contain a table relating aggregates based on the 1972 SIC with aggregates derived from classifying establishments according to the 1967 SIC definitions.

As in earlier censuses, a number of small establishments may have been misclassified as to industry. However, such possible misclassifications have significant effect on *none* of the statistics except the number of establishments. As indicated above, report forms were not mailed to very small establishments (fewer than 10 employees). The industry classifications for these establishments were assigned on the basis of brief descriptions of the general activity of the establishment. Where the description is incomplete or there are relatively fine lines of demarcation among industries or between manufacturing and nonmanufacturing activity, the code assigned to an establishment could differ from that which would have been assigned on the basis of more complete product information. Therefore, the total establishment count for individual industries should be viewed as an approximation rather than a precise measurement. The counts for establishments with 20 employees or more are more reliable than the total number of establishments.

More detailed figures for this State will appear in the final census reports. Final reports will also include a comprehensive discussion of such concepts as "industry" and "establishment," as well as the various statistical items such as "employment," "value of shipments," and "value added." Similar preliminary and final reports will be issued for other States during the coming months. A series of preliminary summary reports showing U.S. totals for each manufacturing industry and for each State are being issued. Final industry reports and final area reports will be published during 1974.

Order forms describing the individual reports and listing their prices may be obtained from any U.S. Department of Commerce district office or from the Publications Distribution Section, Social and Economic Statistics Administration, Washington, D.C. 20233.

The 1972 Census of Manufactures is the 29th census of manufacturing establishments in the United States. For 1972, it was conducted jointly with the censuses of mineral industries, construction industries, retail trade, wholesale trade, and selected services under authority of Title 13 of the United States Code. Title 13 specifies that a census of manufactures be conducted every 5 years and, as amended, to cover years ending in "2" and "7". Title 13 also authorizes an annual sample survey of manufacturing establishments in interim years.



## Appendix B. EXPLANATION OF TERMS

*(For a more complete discussion of these terms and the method of compiling the Census of Manufactures, see the "Introduction" to the 1967 Census of Manufactures, Volume III).*

**All Employees**—All full-time and part-time employees on the payrolls of operating manufacturing establishments for any part of the pay period ending nearest the 12th of the months specified on the report form. Included are all persons on paid sick leave, paid holidays, and paid vacations during these pay periods. Officers of corporations are included as employees; proprietors and partners of unincorporated firms are excluded. The "all employee" number is the average number of production workers for the midmonth payroll period of March, May, August, and November plus the number of nonproduction employees in mid-March.

**Number of Production Workers**—Workers (up through the working foreman level) engaged in fabricating, processing, assembling, inspecting, receiving, packing, warehousing, shipping (but not delivering), and maintenance, repair, janitorial, and watchman services, product development, auxiliary production for plant's own use (e.g., powerplant), recordkeeping, and other closely associated services. Proprietors and partners are excluded.

**Payroll**—This item includes all forms of compensation such as salaries, wages, commissions, dismissal pay, bonuses, vacation and sick leave pay, and compensation in kind, prior to such deductions as employees' Social Security contributions, withholding taxes, group insurance, union dues, and savings bonds. The total includes salaries of officers of these establishments, if a corporation; it excludes payments to the proprietor or partners, if an unincorporated concern. Respondents were told that in reporting they could follow the definition of payrolls used for calculating the Federal withholding tax.

**Man-Hours of Production Workers**—This total relates to production-worker man-hours worked or paid for at the plant including actual overtime hours (not straight-time equivalent hours). It excludes hours paid for vacation, holidays, or sick leave when the employee was not at the plant.

**Cost of Materials**—The term "Cost of Materials" refers to charges actually paid or payable for items consumed or put into production during the year, including freight and other direct charges incurred by the establishment in acquiring these materials. It includes the cost of materials or fuel consumed regardless of

whether these items were purchased by the establishment from other companies, transferred to it from other establishments of the same company, or withdrawn from inventory during the year. The establishment was requested to value materials transferred from other parts of the company at its approximate market value, not at cost of production. The important components of this cost item are (a) all raw materials, semifinished goods, parts, components, containers, scrap, and supplies put into production or used as operating supplies and for repair and maintenance during the year; (b) electric energy purchased; (c) fuels consumed for heat, power, or the generation of electricity; (d) work done by others on materials or parts furnished by manufacturing establishments (contract work); and (e) products bought and resold in the same condition.

**Value of Shipments**—The value of shipments is the received or receivable net selling value, f.o.b. plant (exclusive of freight and taxes), of all products shipped, both primary and secondary, as well as all miscellaneous receipts such as receipts for contract work performed for others, installation and repair, sales of scrap, and sale of products bought and resold without further processing. Included are all items made by the establishment or for it under contract from materials owned by it whether sold, transferred to other plants of the same company, or shipped on consignment. The net selling value of products made in one plant on a contract basis from materials owned by another was reported by the plant providing the materials.

In the case of multiunit companies, the manufacturer was requested to report the value of products transferred to other establishments of the same company at full economic value; i.e., to include not only the direct costs of production but also a reasonable proportion of "all other costs" (including company overhead) and profit.

**Duplication in Cost of Materials and Value of Products**—The aggregate cost of materials and value-of-shipments figures for industry groups and for all manufacturing industries may include large amounts of duplication since the products of some industries are used as materials by others. With some important exceptions, such as motor vehicles and parts, this duplication is not significant within individual industries but arises from the addition of the totals of related industries in successive stages of the production of a finished manufactured product. Examples are the addition of flour mills to bakeries in the food group and the addition of pulp mills to paper mills in the paper and allied products group of industries. Esti-



mates of this duplication indicate that the value of manufactured products exclusive of such duplication—the value of finished manufactures—approximates two-thirds of the total value of products.

Prior to 1962, the Bureau of the Census did not publish figures for cost of materials or value of shipments if they contained significant duplication. Effective with the 1962 annual survey these figures were shown at all industry levels for the United States to meet the requests for their use in studies in which the presence of an indeterminate amount of duplication is not a limiting factor. However, they are appropriately footnoted. Effective with the 1964 annual survey, these industry group totals are also shown at the State, standard metropolitan statistical area, and large-county level.

Even where there is no significant amount of duplication, value-of-shipments figures are deficient as measures of the relative economic importance of individual manufacturing industries or geographic areas because of the wide variation in ratio of materials, labor, and other processing costs to value of shipments among industries.

**Value Added by Manufacture**—This measure of manufacturing activity is derived by subtracting the cost of materials, supplies, containers, fuel, purchased electricity, and cost of resales contract work from the value of shipments for products manufactured plus resales and receipts for services rendered. The result of this calculation is adjusted by the net change in finished goods and work-in-process inventories between the beginning and end of the year. (In the few industries that report value of production rather than value of shipments, only changes in work-in-process inventories are used to adjust value added. In the shipbuilding and repairing industry, no inventory adjustment is made.)

“Value added” avoids the duplication in the value of shipments figure which results from the use of products of some establishments as materials by others. Value added is considered to be the best value measure available for comparing the relative economic importance of manufacturing among industries and geographic areas.

**Expenditures for Plant and Equipment**—Manufacturing establishments in operation and establishments under construction but not yet in operation, were asked to report their expenditures for (a) permanent additions and major alterations to the manufacturing establishment, and (b) new machinery and equipment used for replacement purposes and additions to plant capacity if they are of the type for which depreciation accounts are ordinarily maintained.

These totals exclude expenditures for new facilities and equipment leased from nonmanufacturing concerns; new facilities owned by the Federal Government but operated under contract by private companies; and plant and equipment furnished to the manufacturer by communities and nonprofit organizations. Expenditures for used plant and equipment (although reported in the census), expenditures for land, and cost of maintenance and repairs charged as current operating expense are also omitted from the figures for new capital expenditures.

**Central Administrative Offices and Auxiliary Units**—In the 1972 census as in previous years, respondents were asked to file separate reports for central administrative offices or auxiliary units which were (1) at different locations from the establishments served or, (2) at the same location as one of these establishments but were not operated as an integral part thereof and served two or more establishments. The functions of employees in central administrative offices include general company policy determination, planning and management (that is, company purchasing, accounting, general engineering, direction of company personnel matters, and legal and patent matters). Auxiliaries are storage facilities, garages, repair shops, purchasing offices, sales promotion offices, and research laboratories serving the plants or central management of the company.

**Standard Metropolitan Statistical Areas**—Standard metropolitan statistical areas (SMSA) are integrated economic and social units with a large volume of daily travel and communication between the central city and outlying parts of the area.<sup>1</sup> Each area (except in New England) consists of one whole county or more. An area may contain not only highly industrialized counties but also adjoining counties which, though primarily residential in character, contribute significantly to the industrial counties' labor force and are socially and economically integrated with the central city. These areas are defined by the Federal Committee on Standard Metropolitan Statistical Areas of the Office of Management and Budget for general-purpose use throughout the Federal Government in presenting economic and social data. In the New England States, similar intergration criteria are applied in defining

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<sup>1</sup> Each standard metropolitan statistical area must include either (1) a city with 50,000 or more inhabitants, or (2) a city having a population of at least 25,000 which (a) with the addition of the population of contiguous places has a population density of at least 1,000 persons per square mile; (b) constitutes, for general economic and social purposes, a single community with a combined population of at least 50,000; and (c) includes a total population of at least 75,000 in the county or counties in which the city and contiguous places are located.

SMSA's on a city and town basis because towns rather than counties are regarded as the significant unit in this region of the country.

The requirement that each SMSA consist of county units (except in New England) sometimes results in the inclusion in an area of considerable amount of territory which would not ordinarily be considered "metropolitan," much less "industrial." It is recognized that metropolitan areas could be more accurately defined in terms of smaller area segments such as minor civil

divisions, but the usefulness of areas so defined would be limited by the fact that many types of economic and social data are available only on a county basis.

Each SMSA is designated by the name of the principal city of the area. In addition to the name of the principal city, the area title may include one or two additional city names.

The data for SMSA's which changed definition since the 1967 census have not been retabulated on the new basis for years prior to 1972.



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# 1972 CENSUS OF MANUFACTURES

## AREA SERIES

C72(P)-S44  
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U. S. DEPARTMENT OF COMMERCE • Social and Economic Statistics Administration • BUREAU OF THE CENSUS

## Texas

Value added by manufacturing in 1972 in the State of Texas amounted to \$15,443 million, a 12-percent increase from 1971 and a 41-percent increase from 1967.

This report presents preliminary results from the 1972 Census of Manufactures for the State, its Standard Metropolitan Statistical Areas, and its counties.

Data are provided for industry groups within the State. Historical data, back to 1958, are included for the State as a whole,

and 1967 figures on employment and value added are provided for the smaller areas.

The figures in this report have been subjected to only preliminary review and must be regarded as approximations of the final census figures. No adjustments have been made in the value figures for changes in price level.

For an explanation of the terms used in the tables, see the appendix at the end of this report.

TABLE 1. General Statistics for the State: 1972 and Earlier Years

(See appendix, Explanation of Terms)

Year	Establishments		All employees <sup>1</sup>		Production workers			Value added by manufacture	Cost of materials <sup>2</sup>	Value of shipments <sup>2</sup>	Capital expenditures, new
	Total	With 20 employees or more	Number	Payroll	Number	Man-hours	Wages				
	(number)	(number)	(1,000)	(million dollars)	(1,000)	(millions)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(million dollars)
TEXAS											
1972 Census .....	14,235	4,699	739.5	6,380.0	515.2	1,029.7	3,767.0	15,442.9	21,370.5	36,822.6	1,291.3
1971 ASM .....	NA	NA	694.0	5,689.8	480.3	955.5	3,300.5	13,793.9	19,289.8	33,034.2	1,506.3
1970 ASM .....	NA	NA	722.5	5,584.4	503.4	1,011.3	3,286.5	13,094.8	18,433.0	31,291.1	1,619.1
1969 ASM .....	NA	NA	728.3	5,327.3	515.0	1,051.7	3,222.8	12,922.9	18,520.0	31,308.1	1,490.3
1968 ASM .....	(NA)	NA	688.8	4,875.4	486.0	1,003.8	2,948.5	11,974.5	17,515.9	29,376.0	1,490.2
1967 Census .....	12,722	4,039	657.5	4,340.4	466.4	958.5	2,617.0	10,922.4	15,785.0	26,498.1	1,408.8
1966 ASM .....	(NA)	(NA)	607.6	3,773.5	430.9	899.9	2,313.4	9,725.4	14,276.6	23,824.1	1,215.8
1965 ASM .....	(NA)	(NA)	566.9	3,365.1	400.7	832.6	2,065.2	8,700.2	12,790.6	21,330.1	1,006.2
1964 ASM .....	(NA)	(NA)	535.9	3,130.5	375.9	782.5	1,894.6	7,864.8	11,603.9	19,350.9	745.6
1963 Census .....	11,581	3,478	513.8	2,890.5	361.4	741.4	1,744.0	7,119.5	(NA)	(NA)	567.3
1962 ASM .....	(NA)	(NA)	496.2	2,664.1	351.3	726.6	1,634.5	6,360.7	(NA)	(NA)	587.9
1961 ASM .....	(NA)	(NA)	485.8	2,528.7	344.6	703.2	1,558.0	6,003.6	(NA)	(NA)	646.5
1960 ASM .....	(NA)	(NA)	485.2	2,455.9	345.6	704.8	1,519.5	5,817.0	(NA)	(NA)	514.5
1959 ASM .....	(NA)	(NA)	485.4	2,405.6	347.3	707.9	1,500.7	5,614.0	(NA)	(NA)	431.6
1958 Census .....	10,505	3,088	477.6	2,284.9	343.1	683.1	1,453.9	5,045.2	(NA)	(NA)	611.1

Note: "ASM" data are based on a representative sample of manufacturing establishments canvassed in the Annual Survey of Manufactures. These estimates may differ from the results of a complete canvass of all manufacturing establishments. The standard errors associated with these estimates are published in the annual survey of manufactures volumes for this period. For comparative purposes the 1972 ASM estimate for the State of Texas was 695 thousand employees and \$14,841 million in value added with corresponding standard error of estimate of 1 and 1.

(NA) Not available.

<sup>1</sup>Includes employment and payroll at central administrative offices and auxiliary units. (For a definition of these units, see appendix.)

<sup>2</sup>The total cost of materials and value of shipments may include extensive duplication arising from shipments between establishments in the same industry classification. (For a more complete explanation, see appendix.)

TABLE 2. General Statistics for the State, Standard Metropolitan Statistical Areas, and Counties: 1972 and 1967

(See appendix, Explanation of Terms)

State, standard metropolitan statistical areas, and counties <sup>1</sup>	1972											1967	
	Establishments		All employees <sup>2</sup>		Production workers			Value added by manufac- ture	Cost of materials <sup>3</sup>	Value of shipments <sup>3</sup>	Capital expendi- tures, new	All employees	Value added by manufac- ture
	Total	With 20 employees or more	Number	Payroll	Number	Man-hours	Wages						
	(number)	(number)	(1,000)	(million dollars)	(1,000)	(million)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(1,000)	(million dollars)
Texas, total.....	14,235	4,699	739.5	6,380.0	515.2	1,029.7	3,767.0	15,442.9	21,370.5	36,822.6	1,291.3	657.5	10,922.4
STANDARD METROPOLITAN STATISTICAL AREAS <sup>4</sup>													
Abilene.....	121	35	5.1	31.6	3.9	7.8	20.0	61.4	127.0	188.8	14.3	4.0	61.9
Amarillo.....	166	47	5.7	40.8	3.8	7.1	23.0	72.8	133.5	208.5	4.0	4.5	51.3
Austin.....	317	83	12.7	100.1	7.4	15.0	49.1	236.7	184.0	413.6	10.4	7.0	66.1
Beaumont-Port Arthur-Orange.....	314	117	37.3	411.8	27.7	54.0	277.8	1,035.5	2,774.4	3,821.4	157.2	33.2	1,166.4
Brownsville-Harlingen-San Benito.....	128	42	6.7	38.5	5.3	11.3	27.2	143.7	208.6	351.0	26.2	5.4	61.6
Bryan-College Station.....	56	13	2.0	12.9	1.5	3.0	8.2	27.5	35.4	63.6	2.5	(NA)	(NA)
Corpus Christi.....	218	61	10.9	102.3	7.5	15.1	64.0	281.6	709.4	1,004.6	72.8	10.0	242.0
Dallas-Fort Worth.....	4,142	1,441	231.1	2,009.2	150.0	298.3	1,105.7	4,028.6	4,225.8	8,333.6	209.1	227.3	3,011.5
El Paso.....	291	113	25.9	156.4	21.4	42.0	114.7	346.2	691.1	1,031.4	28.4	18.9	196.0
Galveston-Texas City.....	107	38	10.9	124.1	7.7	16.3	83.4	693.3	1,044.7	1,744.0	33.8	10.1	497.7
Houston.....	3,102	1,027	161.9	1,647.5	99.8	202.6	853.3	4,280.1	5,661.2	9,834.3	406.4	138.1	2,873.0
Killeen-Temple.....	106	48	5.0	33.5	3.9	7.8	21.6	80.8	88.3	169.1	9.9	(NA)	(NA)
Laredo.....	43	14	1.0	5.4	.7	1.5	3.7	7.8	12.8	20.9	.6	.7	5.3
Lubbock.....	237	72	7.7	53.5	5.5	10.8	33.0	127.4	188.5	308.7	8.1	6.0	66.9
McAllen-Pharr-Edinburg.....	133	33	3.2	15.9	2.5	5.1	11.4	54.5	65.8	119.2	3.9	2.4	21.7
Midland.....	76	17	1.3	9.9	.8	1.5	4.7	22.4	18.7	40.4	1.2	.7	7.4
Odessa.....	140	43	3.7	35.5	2.3	4.6	20.4	89.6	162.9	323.1	9.1	3.4	94.2
San Angelo.....	88	25	3.2	19.8	2.5	5.1	14.1	65.3	67.6	132.2	1.6	3.2	43.7
San Antonio.....	735	248	32.5	215.4	23.0	45.8	130.4	458.3	525.0	982.1	28.3	27.4	287.3
Sherman-Denison.....	102	48	8.2	59.8	6.5	12.9	41.6	178.8	210.1	379.9	9.8	6.7	94.1
Texarkana, TX-Texarkana, AR.....	106	39	9.2	67.7	6.3	11.7	40.2	161.5	166.1	318.7	7.3	10.7	51.2
Tyler.....	120	47	11.9	95.1	9.5	18.7	69.3	225.1	251.0	469.6	12.0	8.8	112.4
Waco.....	219	95	12.7	88.3	9.7	18.5	59.2	192.0	200.9	388.5	19.3	11.0	151.4
Wichita Falls.....	138	44	4.7	31.0	3.5	6.9	19.8	65.6	80.5	145.1	3.6	3.6	34.5
COUNTIES													
Anderson.....	39	14	1.4	8.6	1.2	2.2	6.7	19.5	34.9	54.1	1.3	1.2	15.6
Angelina.....	109	34	8.3	66.8	6.6	13.8	48.7	148.8	151.1	299.4	22.6	7.2	92.9
Bastrop.....	21	9	.7	3.7	.6	1.2	2.7	7.2	5.6	12.9	.5	1.0	7.5
Bell.....	91	43	4.7	32.0	3.6	7.2	20.5	78.0	86.4	164.3	9.8	3.4	38.0
Bexar.....	692	230	30.5	204.1	21.5	42.6	121.9	439.6	489.2	925.1	24.9	25.6	270.4
Bosque.....	18	10	.8	3.8	.7	1.4	2.9	7.9	9.2	17.1	.3	.4	3.9
Bowie.....	55	26	6.3	42.2	4.1	7.5	22.1	75.8	74.2	141.0	4.4	9.8	41.6
Brazoria.....	108	36	10.5	134.0	6.0	10.8	59.4	600.8	672.6	1,284.6	(D)	10.5	474.9
Brazos.....	56	13	2.0	12.9	1.5	3.0	8.2	27.5	35.4	63.6	2.5	1.5	12.6
Brown.....	42	19	1.9	13.1	1.6	3.1	9.2	57.4	50.9	109.4	2.4	1.3	14.7
Cameron.....	128	42	6.7	38.5	5.3	11.3	27.2	96.4	156.9	272.0	23.8	5.4	61.6
Cass.....	31	8	.9	4.2	.8	1.2	3.1	8.0	11.4	19.4	.8	.3	2.2
Cherokee.....	97	34	2.9	15.3	2.5	5.0	12.0	33.6	22.9	56.2	2.2	2.2	14.7
Collin.....	85	32	4.3	25.4	3.0	6.2	16.9	56.0	63.0	120.7	3.3	3.3	36.8
Comanche.....	17	6	.3	1.6	.2	.5	1.0	7.3	10.3	17.6	.4	.2	3.0
Cooke.....	42	16	2.2	15.1	1.8	3.7	10.9	31.7	33.2	64.5	1.3	1.4	13.0
Coryell.....	15	5	.3	1.5	.3	.6	1.1	2.8	1.8	4.7	.1	.1	.8
Dallas.....	2,531	892	145.6	1,285.9	92.3	182.1	659.7	2,475.0	2,337.1	4,799.7	130.9	137.8	1,669.6
Dawson.....	18	3	.3	1.6	.3	.6	1.3	2.5	6.3	9.8	.2	.2	1.3
Deaf Smith.....	26	9	.8	6.8	.6	1.3	5.0	23.7	133.3	155.5	.9	.5	8.5
Denton.....	80	25	4.2	27.2	3.1	6.1	16.9	56.5	40.8	95.8	3.4	2.7	34.3
De Witt.....	29	11	.6	3.0	.5	.9	2.1	8.4	20.3	28.6	.4	1.3	11.7
Eastland.....	26	7	.7	3.3	.7	1.3	2.8	10.2	5.9	16.4	2.0	.7	6.3
Ector.....	140	43	3.7	35.5	2.3	4.6	20.4	133.3	114.3	251.0	5.9	3.4	94.2
Ellis.....	64	29	3.8	26.8	3.1	5.8	19.0	83.5	53.8	137.1	16.5	3.4	48.0
El Paso.....	292	114	26.0	157.0	21.4	42.1	115.1	346.5	691.5	1,032.2	28.4	18.9	196.0
Erath.....	14	3	.3	1.3	.2	.3	1.0	2.9	2.5	5.1	.1	.2	1.9
Falls.....	9	5	.4	2.1	.3	.6	1.2	5.3	6.7	11.7	.1	.3	1.9
Fannin.....	24	9	1.1	8.1	.8	1.7	6.1	25.2	38.0	62.1	5.7	1.7	24.3
Fayette.....	20	5	.4	2.5	.4	.8	1.7	7.0	8.7	15.6	.3	.2	2.2
Fort Bend.....	48	20	4.1	41.0	3.0	7.1	27.6	87.4	139.4	216.4	13.0	2.7	54.9
Galveston.....	107	38	10.9	124.1	7.7	16.3	83.4	687.3	1,042.6	1,735.9	33.8	10.1	497.7
Gonzales.....	20	9	.8	3.7	.7	1.2	3.1	10.2	42.1	52.2	1.2	.5	3.3
Gray.....	39	11	2.1	17.5	1.3	2.8	10.0	56.7	38.4	96.5	1.6	1.8	50.9
Grayson.....	102	48	8.2	59.8	6.5	12.9	41.6	178.8	210.1	379.9	9.8	6.7	94.1
Groesbeck.....	139	47	8.2	67.2	6.3	16.3	46.0	171.2	181.9	352.2	6.5	5.6	84.6
Grimes.....	21	11	.4	2.5	.3	.7	1.9	5.5	11.0	16.4	1.1	.2	1.2
Guadalupe.....	25	10	1.1	6.4	.8	1.7	5.0	9.4	20.9	33.1	2.9	1.8	16.9
Hale.....	47	12	1.3	9.6	.9	1.9	6.3	30.9	170.9	199.7	1.7	.7	9.6
Hardeman.....	9	3	.4	3.5	.3	.8	2.8	7.4	10.6	18.1	.5	(D)	(D)
Hardin.....	45	10	1.7	12.4	1.3	3.1	9.2	24.3	20.8	45.3	3.2	(D)	(D)
Harris.....	2,836	956	147.0	1,506.8	92.4	186.1	780.0	3,556.0	4,920.4	8,416.0	301.6	123.2	2,324.1
Harrison.....	60	26	7.7	78.7	4.8	9.9	41.5	183.1	153.5	331.2	21.2	7.3	127.5
Hartley.....	19	7	.5	3.0	.3	.7	1.6	8.1	8.8	16.8	.2	.2	1.1
Henderson.....	32	12	1.9	10.4	1.7	3.4	9.0	25.0	38.9	61.7	1.4	2.1	19.1

See footnotes at end of table.



TABLE 2. General Statistics for the State, Standard Metropolitan Statistical Areas, and Counties: 1972 and 1967—Continued

(See appendix, Explanation of Terms)

State, standard metropolitan statistical areas, and counties <sup>1</sup>	1972											1967	
	Establishments		All employees <sup>2</sup>		Production workers			Value added by manufacture	Cost of materials <sup>3</sup>	Value of shipments <sup>3</sup>	Capital expenditures, new	All employees	Value added by manufacture
	Total	With 20 employees or more	Number	Payroll	Number	Man-hours	Wages						
	(number)	(number)	(1,000)	(million dollars)	(1,000)	(million)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(1,000)	(million dollars)
COUNTIES--Continued													
Hidalgo.....	133	33	3.2	15.9	2.5	5.1	11.4	54.5	65.8	119.2	3.8	2.4	21.7
Hill.....	30	15	1.5	8.9	1.2	2.3	6.3	21.0	33.8	52.8	2.2	1.1	8.6
Hopkins.....	29	10	1.7	9.9	1.4	2.8	7.4	23.6	28.3	52.1	.7	1.5	16.1
Houston.....	37	7	.7	5.4	.6	1.3	4.0	14.0	17.8	31.5	.7	.5	4.2
Howard.....	25	8	1.5	14.3	1.1	2.3	10.1	40.1	105.2	149.4	11.5	1.1	44.3
Hunt.....	50	18	3.8	31.7	2.7	5.2	20.1	52.4	40.6	93.5	2.1	5.5	54.3
Jasper.....	59	10	2.7	23.0	2.0	4.5	15.3	55.3	55.1	110.4	3.9	.9	8.5
Jefferson.....	217	85	27.9	313.9	20.9	40.8	216.1	730.4	2,491.9	3,232.0	124.5	24.7	988.7
Kaufman.....	35	13	1.3	9.1	1.1	2.4	6.4	21.9	19.7	40.9	.7	(D)	(D)
Lamar.....	44	20	4.3	31.0	3.4	6.8	23.0	105.1	130.4	234.8	3.4	3.8	68.6
Lavaca.....	28	5	.6	3.6	.5	1.0	2.5	4.8	5.6	10.6	.8	.5	4.4
Liberty.....	39	5	.4	2.2	.3	.4	1.5	4.9	6.8	11.7	.8	.5	4.1
Limestone.....	17	7	.6	3.0	.5	.8	2.3	6.0	4.4	10.3	.6	.5	4.5
Lubbock.....	238	72	7.7	53.6	5.5	10.8	33.1	127.9	189.8	312.8	8.2	6.0	66.9
McLennan.....	220	96	12.8	88.5	9.7	18.5	59.3	192.2	201.4	389.3	19.4	11.0	151.4
Marion.....	21	2	.3	1.7	.3	.5	1.2	3.1	5.5	8.4	.1	.2	1.8
Medina.....	12	3	.6	4.4	.5	1.1	3.3	7.7	2.0	9.4	.3	.5	5.1
Midland.....	76	17	1.3	9.9	.8	1.5	4.7	22.4	18.7	40.4	1.2	.7	7.4
Montague.....	23	5	.9	4.9	.8	1.5	4.0	9.3	6.3	15.4	.4	.7	4.4
Montgomery.....	71	18	1.3	8.8	1.0	2.0	6.3	33.7	41.5	74.9	2.7	1.2	15.1
Nacogdoches.....	63	19	3.0	18.6	2.5	5.1	15.0	45.9	57.7	99.9	2.6	2.5	23.4
Navarro.....	34	16	1.8	11.3	1.4	2.9	7.9	28.9	33.3	61.4	1.0	2.8	27.3
Newton.....	39	5	.4	1.8	.3	.7	1.5	5.2	5.5	10.7	.3	.3	2.6
Nolan.....	21	10	1.1	8.8	.9	1.9	6.7	18.4	29.6	47.6	1.2	1.0	14.4
Orange.....	53	23	8.1	89.2	5.8	11.1	55.8	286.4	267.4	555.5	29.5	8.5	177.7
Palo Pinto.....	35	16	2.3	14.1	1.8	3.6	9.3	28.2	23.4	50.8	1.5	1.7	18.6
Polk.....	43	5	.6	3.8	.5	1.1	3.2	7.6	8.4	16.0	.7	.9	6.5
Potter.....	144	42	5.2	37.7	3.3	6.3	20.8	67.5	124.1	193.9	3.8	4.0	47.9
Randall.....	22	5	.6	3.1	.4	.8	2.1	5.3	9.4	14.7	.2	.4	3.4
Red River.....	21	7	.8	3.9	.6	1.1	2.7	8.9	10.7	19.7	.8	.6	3.6
Reeves.....	14	3	.4	1.6	.3	.4	1.3	3.9	5.6	9.5	.2	.2	1.8
Robertson.....	14	5	.4	2.8	.4	.7	2.1	6.7	9.1	15.5	.6	.3	2.3
Runnels.....	12	6	.6	4.7	.5	.9	3.3	7.0	9.4	16.4	.5	.3	2.6
Rusk.....	45	12	1.3	7.8	1.1	2.3	5.6	13.5	11.0	24.5	1.7	.9	6.5
Scurry.....	17	5	.4	2.3	.3	.5	1.7	8.0	3.0	10.9	.6	.1	.6
Shelby.....	43	7	1.1	5.6	.8	1.7	3.7	8.6	12.3	20.9	.6	1.4	8.6
Smith.....	120	47	11.9	95.1	9.5	18.7	69.3	225.1	251.0	469.6	12.0	8.8	112.4
Stephens.....	18	7	.8	4.3	.6	1.2	2.8	6.3	11.5	18.2	.1	.5	3.7
Tarrant.....	1,238	417	67.9	630.5	46.4	94.2	383.9	1,347.8	1,732.5	3,164.5	53.9	76.2	1,825.0
Taylor.....	102	31	4.9	29.5	3.7	7.3	18.4	56.8	116.4	173.4	14.0	3.9	60.9
Titus.....	23	8	1.0	6.1	.9	1.9	5.1	20.9	61.3	82.3	.4	.8	11.5
Tom Green.....	89	26	3.4	21.4	2.6	5.3	14.9	65.5	75.9	156.7	1.9	3.2	43.7
Travis.....	299	77	12.3	97.2	7.1	14.4	47.4	229.2	175.1	397.4	10.1	7.0	64.7
Tyler.....	47	4	.7	3.6	.6	1.2	3.1	9.2	10.3	19.5	.7	.7	4.8
Upshur.....	16	3	.4	2.2	.4	.7	1.8	5.4	9.2	13.7	1.0	.5	4.5
Van Zandt.....	22	8	.7	4.1	.7	1.4	3.4	7.2	4.8	12.0	.4	(D)	(D)
Victoria.....	38	13	2.8	25.8	1.9	3.8	14.2	103.5	82.0	183.8	20.8	1.9	52.7
Walker.....	31	7	.7	5.7	.6	1.5	4.6	12.9	16.9	29.6	1.2	.3	2.1
Washington.....	28	11	1.1	7.1	.9	1.9	5.1	18.3	19.7	37.9	3.9	1.1	11.7
Wharton.....	27	6	.4	2.0	.2	.5	1.2	6.6	15.0	21.9	.3	1.1	8.1
Wilbarger.....	15	7	.8	3.9	.6	1.2	2.8	13.0	23.9	36.8	1.5	.6	4.5
Williamson.....	40	15	1.2	6.6	1.1	2.1	4.9	11.9	17.1	29.0	.7	.9	8.5
Wood.....	21	2	.6	2.8	.5	1.1	2.3	7.5	9.2	16.6	.1	.5	4.1
Young.....	20	6	.9	6.3	.7	1.4	4.0	19.5	15.1	34.7	(D)	.6	9.4

(NA) Not available. (D) Withheld to avoid disclosing figures for individual companies.

<sup>1</sup>Some counties were withheld from publication in order to (a) avoid disclosing figures for individual companies or (b) permit further checking of the figures for smaller counties. Additional detail will appear in the final report for this State.<sup>2</sup>Includes employment and payroll at central administrative offices and auxiliary units. (For a definition of these units, see appendix.)<sup>3</sup>The total cost of materials and value of shipments may include extensive duplication arising from shipments between establishments in the same industry classification. (For a more complete explanation, see appendix.)<sup>4</sup>The standard metropolitan statistical areas in this State are defined as follows:

ABILENE SMSA: Consists of Callahan, Jones, and Taylor counties, TX.  
 AMARILLO SMSA: Consists of Potter and Randall counties, TX.  
 AUSTIN SMSA: Consists of Hays and Travis counties, TX.  
 BEAUMONT-PORT ARTHUR-ORANGE SMSA: Consists of Hardin, Jefferson, and Orange counties, TX.  
 BROWNSVILLE-HARLINGEN-SAN BENITO SMSA: Coextensive with Cameron County, TX.

BRYAN-COLLEGE STATION SMSA: Coextensive with Brazos County, TX.  
 CORPUS CHRISTI SMSA: Consists of Nueces and San Patricio counties, TX.  
 DALLAS-FORT WORTH SMSA: Consists of Collin, Dallas, Denton, Ellis, Hood, Johnson, Kaufman, Parker, Rockwall, Tarrant, and Wise counties, TX.  
 EL PASO SMSA: Coextensive with El Paso County, TX.  
 GALVESTON-TEXAS CITY SMSA: Coextensive with Galveston County, TX.  
 HOUSTON SMSA: Consists of Brazoria, Fort Bend, Harris, Liberty, Montgomery, and Waller counties, TX.

KILLEEN-TEMPLE SMSA: Consists of Bell and Coryell counties, TX.  
 LAREDO SMSA: Coextensive with Webb County, TX.  
 LUBBOCK SMSA: Coextensive with Lubbock County, TX.  
 MCALLEN-PHARR-EDINBURG SMSA: Coextensive with Hidalgo County, TX.  
 MIDLAND SMSA: Coextensive with Midland County, TX.

ODESSA SMSA: Coextensive with Ector County, TX.  
 SAN ANGELO SMSA: Coextensive with Tom Green County, TX.  
 SAN ANTONIO SMSA: Consists of Bexar, Comal, and Guadalupe counties, TX.  
 SHERMAN-DENISON SMSA: Coextensive with Grayson County, TX.  
 TEXARKANA, TX-TEXARKANA, AR, SMSA: Consists of Bowie County, TX, and Little River and Miller counties, AR.

TYLER SMSA: Coextensive with Smith County, TX.  
 WACO SMSA: Coextensive with McLennan County, TX.  
 WICHITA FALLS SMSA: Consists of Clay and Wichita counties, TX.

TABLE 3. General Statistics for the State, by Industry Groups and Industries: 1972 and 1967

(See appendix, Explanation of Terms)

Code	Industry	1972											1967	
		Establishments		All employees		Production workers			Value added by manufacture	Cost of materials <sup>1</sup>	Value of shipments <sup>1</sup>	Capital expenditures, new	All employees	Value added by manufacture
		Total	With 20 employees or more	Number	Payroll	Number	Man-hours	Wages						
		(number)	(number)	(1,000)	(million dollars)	(1,000)	(million)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(1,000)	(million dollars)
	All industries <sup>2</sup> .....	14,445	4,703	739.5	6,380.0	515.2	1,029.7	3,767.0	15,442.9	21,370.5	36,822.6	1,291.3	657.5	10,922.4
20	Food and kindred products.....	1,468	651	76.7	542.5	50.4	102.4	315.6	1,684.8	3,865.3	5,524.8	108.7	78.7	1,172.3
201	Meat products.....	282	129	16.7	110.4	13.7	28.1	82.6	255.0	1,378.8	1,622.3	19.2	16.2	175.3
2016	Poultry dressing plants.....	34	28	5.2	22.7	4.9	9.1	19.5	45.2	142.6	187.4	3.5	(NA)	(NA)
202	Dairy products.....	110	67	7.5	53.5	2.9	6.3	19.1	129.5	339.4	467.9	14.7	9.3	127.3
2026	Fluid milk.....	66	51	6.3	45.8	2.3	5.0	15.2	115.8	276.8	391.8	10.1	8.2	106.7
203	Preserved fruits and vegetables..	92	45	6.9	40.9	5.7	11.0	29.0	129.1	215.6	344.0	6.5	9.5	101.6
2033	Canned fruits and vegetables.....	25	11	1.5	7.0	1.3	2.1	4.9	23.4	34.1	57.5	.8	2.0	20.3
2035	Pickles, sauces, salad dressings...	23	5	1.1	8.6	.9	1.9	6.3	13.3	61.1	74.5	.9	1.0	5.6
2038	Frozen specialties.....	17	12	1.4	6.3	1.2	2.3	4.8	17.8	16.5	34.3	.6	(NA)	(NA)
204	Grain mill products.....	199	83	7.2	53.6	5.1	10.5	31.5	190.5	549.3	733.4	13.0	7.3	133.5
2041	Flour and other grain mill products	23	11	.9	7.0	.7	1.6	5.1	24.6	74.3	99.1	.6	EE	(D)
2044	Rice milling.....	8	8	1.3	13.0	.9	1.9	6.2	76.8	183.2	253.3	2.9	1.3	40.4
205	Bakery products.....	145	71	10.5	80.6	5.7	11.8	41.1	184.2	148.5	332.6	10.5	11.3	139.4
206	Sugar and confectionery products.	57	17	2.8	18.7	2.2	4.6	13.3	55.0	137.8	188.0	3.4	CC	(D)
207	Fats and oils.....	75	42	3.5	26.6	2.8	6.9	18.4	96.7	287.5	385.5	7.2	EE	(D)
2074	Cottonseed oil mills.....	31	23	1.5	9.7	1.2	2.7	6.8	33.8	112.6	145.8	3.2	1.9	23.5
2077	Animal and marine fats and oils....	32	18	.6	4.3	.4	1.0	2.7	15.2	14.8	29.7	(D)	.8	7.4
2079	Shortening and cooking oils.....	8	7	1.3	12.0	1.0	2.0	8.4	46.8	145.4	194.0	2.4	1.5	43.5
208	Beverages.....	202	121	12.3	96.1	5.0	10.2	36.0	351.8	363.6	714.2	23.1	12.0	231.4
2086	Bottled and canned soft drinks.....	174	110	9.4	62.3	3.3	6.7	16.8	139.7	182.5	321.5	16.0	8.9	101.7
209	Misc. foods and kindred products.	300	76	9.3	61.9	7.4	13.8	44.4	292.5	444.2	736.3	11.2	10.2	219.8
2092	Fresh or frozen packaged fish.....	23	17	2.3	9.5	2.1	3.9	7.9	22.3	123.6	145.9	(D)	FF	(D)
2095	Roasted coffee.....	8	5	1.3	14.5	1.1	2.2	11.7	114.3	198.6	311.7	(D)	1.0	77.5
2097	Manufactured ice.....	90	10	1.0	5.8	.7	1.5	3.4	13.6	3.0	16.6	1.1	1.0	7.0
2099	Food preparations, n.e.c.....	171	41	4.6	31.1	3.5	6.1	20.7	140.8	117.9	259.4	5.2	3.9	60.0
22	Textile mill products.....	74	31	4.7	25.6	4.2	8.5	20.3	49.2	74.0	121.5	3.1	7.7	59.0
225	Knitting mills.....	10	5	1.0	4.7	.9	1.9	4.0	6.5	4.5	11.1	.2	CC	(D)
2257	Circular knit fabric mills.....	4	2	.1	.5	.1	.1	.3	.6	1.3	1.8	.1	(NA)	(NA)
229	Miscellaneous textile goods.....	36	13	1.1	5.3	.9	1.7	4.0	11.1	11.2	22.3	.8	.7	6.2
23	Apparel, and other textile prod.	696	372	66.3	311.1	58.9	113.6	243.8	553.8	620.6	1,181.3	31.9	52.0	344.7
231	Men's and boys' suits and coats..	15	6	1.5	6.8	1.3	2.5	5.5	11.6	5.2	16.8	.1	(NA)	(NA)
2311	Men's and boys' suits and coats....	15	6	1.5	6.8	1.3	2.5	5.5	11.6	5.2	16.8	.1	1.9	12.5
232	Men's and boys' furnishings.....	109	97	32.6	151.1	29.4	55.5	121.2	261.5	317.0	587.3	12.8	25.0	166.1
2321	Men's and boys' shirts and nightwear	5	4	.3	1.4	.3	.7	1.3	2.2	.2	2.3	-	EE	(D)
2327	Men's and boys' separate trousers..	38	34	17.4	86.7	15.4	29.1	65.2	136.1	230.7	376.9	5.2	12.6	96.2
2328	Men's and boys' work clothing.....	49	46	13.4	56.3	12.5	23.0	49.0	115.7	96.8	211.1	7.4	10.3	57.3
233	Women's, and misses' outerwear...	223	149	17.5	83.9	15.3	31.4	63.8	144.2	138.3	281.3	14.6	12.2	78.9
2335	Women's and misses' dresses.....	141	83	8.8	44.0	7.7	13.9	33.9	65.0	61.4	126.5	(D)	8.5	55.2
2339	Women's, misses' outerwear, n.e.c..	38	30	4.3	19.3	3.5	6.4	13.1	43.4	49.2	92.5	1.2	1.5	9.3
234	Women's, children's undergarments	20	15	3.4	15.6	3.1	5.7	12.9	24.0	22.2	45.6	1.5	3.2	22.1
236	Children's outerwear.....	24	18	2.4	9.9	2.2	4.0	7.8	16.3	12.2	29.2	.2	2.2	11.3
238	Misc. apparel and accessories....	33	17	1.1	5.4	.9	1.7	3.7	9.3	8.3	18.5	.4	1.6	10.7
239	Misc. fabricated textile products	253	66	5.9	29.1	5.2	9.8	21.8	56.5	80.1	136.3	2.1	3.8	29.9
2391	Curtains and draperies.....	85	17	1.6	7.7	1.4	2.5	5.6	16.2	26.8	43.3	.6	.8	5.8
2392	House furnishings, n.e.c.....	37	10	.9	4.6	.8	1.5	3.5	9.4	11.0	20.3	.3	.9	6.6
2394	Canvas and related products.....	40	3	.4	2.2	.3	.6	1.5	3.7	4.3	8.1	.2	.4	3.1
2399	Fabricated textile products, n.e.c.	36	12	1.2	6.0	1.2	2.2	4.9	11.0	14.8	25.6	.6	.3	2.4
24	Lumber and wood products.....	1,192	269	29.1	174.9	25.0	49.2	133.9	341.8	559.3	896.5	31.3	19.1	145.8
241	Logging camps, logging contractor	390	7	1.6	8.1	1.5	2.6	7.3	24.3	43.3	67.6	3.2	-	-
2411	Logging camps, logging contractors.	390	7	1.6	8.1	1.5	2.6	7.3	24.3	43.3	67.6	3.2	1.3	11.0
242	Sawmills and planing mills.....	213	59	5.7	35.5	5.0	10.6	28.6	68.1	82.5	150.7	7.3	7.7	53.8
2421	Sawmills and planing mills, general	187	53	5.3	33.1	4.6	9.8	26.6	63.9	77.3	141.6	(D)	6.9	50.4
243	Millwork, plywood, struc. members	322	97	10.4	60.6	8.8	17.1	45.7	117.2	180.9	295.5	9.4	6.0	51.3
2431	Millwork.....	161	53	6.1	34.1	5.0	9.6	24.6	69.1	111.4	177.7	4.5	(NA)	(NA)
2434	Wood kitchen cabinets.....	113	23	2.3	12.2	2.0	3.7	9.6	19.3	21.0	39.8	.9	(NA)	(NA)
244	Wood containers.....	42	27	2.2	10.7	2.0	3.8	8.7	23.0	19.8	42.7	1.7	1.3	8.9
2441	Nailed wood boxes and shooks.....	17	9	.8	4.7	.8	1.6	3.9	7.7	10.3	17.8	1.2	.5	4.0

See footnotes at end of table.



TABLE 3. General Statistics for the State, by Industry Groups and Industries: 1972 and 1967—Continued

(See appendix, Explanation of Terms)

Code	Industry	1972											1967	
		Establishments		All employees		Production workers			Value added by manufacture	Cost of materials <sup>1</sup>	Value of shipments <sup>1</sup>	Capital expenditures, new	All employees	Value added by manufacture
		Total (number)	With 20 employees or more (number)	Number (1,000)	Payroll (million dollars)	Number (1,000)	Man-hours (million)	Wages (million dollars)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(1,000)	(million dollars)
24	Lumber and wood products--Con.													
245	Wood buildings and mobile homes..	65	52	6.7	44.3	5.5	10.5	32.2	77.3	193.0	308.3	5.8	-	-
2451	Mobile homes.....	56	48	6.1	39.8	5.1	9.7	29.8	70.0	175.4	242.6	5.4	(NA)	(NA)
2452	Prefabricated wood buildings.....	9	4	.6	4.5	.4	.8	2.4	8.3	17.5	25.7	.4	(NA)	(NA)
249	Miscellaneous wood products.....	160	30	2.6	15.4	2.1	4.6	11.5	31.6	39.8	71.6	3.8	2.8	20.8
2491	Wood preserving.....	26	11	.8	4.7	.7	1.5	3.5	9.3	18.7	28.3	2.4	.9	7.6
2499	Wood products, n.e.c.....	134	19	1.7	10.7	1.4	3.1	7.9	22.3	21.1	43.2	1.4	(NA)	(NA)
25	Furniture and fixtures.....	428	166	16.0	96.7	13.1	25.1	67.2	215.3	194.0	414.9	10.8	13.5	117.6
251	Household furniture.....	241	107	10.4	59.5	8.7	16.7	43.5	121.2	142.1	267.4	7.6	8.6	72.7
2511	Wood household furniture.....	82	24	2.7	15.2	2.3	4.7	11.1	31.8	29.3	60.9	2.2	(NA)	(NA)
2512	Upholstered household furniture....	60	40	3.6	20.8	3.0	5.6	15.1	35.6	34.3	69.6	1.5	(NA)	(NA)
2514	Metal household furniture.....	18	13	1.7	8.9	1.5	2.7	7.3	20.4	25.3	44.3	1.1	EE	(D)
253	Public building, related furniture	22	12	2.2	12.3	1.8	3.4	8.2	21.4	21.2	42.1	.6	-	-
2531	Public building, related furniture.	22	12	2.2	12.3	1.8	3.4	8.2	21.4	21.2	42.1	.6	2.2	19.8
254	Partitions and fixtures.....	83	32	2.2	16.2	1.7	3.1	10.5	31.0	20.7	51.5	1.3	1.9	17.2
26	Paper and allied products.....	194	128	17.3	150.5	13.4	27.5	103.5	341.6	396.0	735.2	29.7	14.6	215.8
264	Misc. converted paper products...	83	46	5.4	41.2	4.1	8.3	27.5	85.6	92.8	176.4	5.2	5.1	62.9
2643	Bags, except textile bags.....	25	15	2.5	18.4	1.8	3.8	12.3	35.7	46.0	80.8	2.4	2.5	29.8
2648	Stationery products.....	12	5	.6	3.7	.4	.9	2.5	9.9	10.8	20.6	.3	(NA)	(NA)
265	Paperboard containers and boxes...	92	58	6.6	50.7	5.2	10.4	33.5	105.2	155.5	258.3	5.8	4.9	51.3
2653	Corrugated and solid fiber boxes...	55	41	4.2	33.2	3.3	6.3	21.4	64.2	99.8	163.0	3.7	3.0	31.3
2654	Sanitary food containers.....	10	8	1.0	8.0	.8	1.8	5.2	20.6	31.1	50.8	.4	CC	(D)
2655	Fiber cans, drums, similar products	12	8	.3	2.9	.3	.6	2.3	7.8	12.0	19.6	.2	1.4	5.3
266	Building paper and board mills...	8	7	.5	3.8	.4	.9	3.1	8.3	6.7	15.0	.3	-	-
2661	Building paper and board mills.....	8	7	.5	3.8	.4	.9	3.1	8.3	6.7	15.0	.3	.2	1.7
27	Printing and publishing.....	2,081	346	41.1	327.9	25.3	47.7	184.1	666.9	338.1	976.5	43.9	33.7	384.1
271	Newspapers.....	531	102	18.1	138.2	8.5	15.6	66.3	306.7	111.4	417.6	20.4	-	-
2711	Newspapers.....	531	102	18.1	138.2	8.5	15.6	66.3	306.7	111.4	417.6	20.4	15.5	177.7
273	Books.....	56	15	2.3	24.2	1.6	3.3	9.7	36.8	14.1	49.5	.8	2.0	25.2
275	Commercial printing.....	1,112	145	11.7	94.5	8.9	16.8	64.6	165.4	117.8	282.5	11.8	9.7	100.9
2751	Commercial printing, letterpress...	688	42	4.2	32.1	3.2	5.9	23.2	61.4	48.7	109.5	5.0	(NA)	(NA)
2752	Commercial printing, lithographic..	397	96	7.4	62.6	5.5	10.5	42.1	103.8	76.5	176.1	6.9	(NA)	(NA)
276	Manifold business forms.....	45	26	3.4	26.6	2.4	5.1	17.4	64.3	41.8	104.2	4.5	-	-
2761	Manifold business forms.....	45	26	3.4	26.6	2.4	5.1	17.4	64.3	41.8	104.2	4.5	2.4	36.2
279	Printing trade services.....	107	18	1.4	14.3	1.1	2.0	10.1	23.6	5.7	29.4	1.5	1.1	14.2
2791	Typesetting.....	71	10	.8	8.3	.7	1.3	6.1	12.7	2.5	15.3	.8	.8	9.0
28	Chemicals and allied products..	728	288	57.7	684.0	36.1	71.3	378.5	3,237.2	2,869.3	6,085.4	402.9	47.9	2,076.7
281	Industrial inorganic chemicals...	74	35	6.2	69.2	4.2	8.5	42.7	261.2	299.0	554.8	46.0	27.2	1,454.1
2819	Industrial inorganic chemicals.....	28	20	3.1	34.1	2.3	4.5	22.6	104.2	176.9	278.4	8.2	(NA)	(NA)
282	Plastics materials and synthetics	34	29	9.7	121.1	6.6	13.4	75.9	468.2	629.9	1,098.1	62.6	9.0	288.7
283	Drugs.....	50	17	2.2	22.4	1.0	1.9	5.7	67.3	23.2	88.3	2.5	1.3	22.6
2834	Pharmaceutical preparations.....	27	10	1.3	13.5	.4	.8	2.6	37.3	13.0	49.8	2.0	1.1	18.4
284	Soaps, cleaners, and toilet goods	133	28	2.4	22.6	1.3	2.7	11.1	129.7	83.7	211.0	5.9	1.5	80.4
285	Plants and allied products.....	87	41	3.5	33.1	1.9	3.8	14.2	102.2	123.6	223.1	3.3	-	-
2851	Plants and allied products.....	87	41	3.5	33.1	1.9	3.8	14.2	102.2	123.6	223.1	3.3	3.0	71.7
286	Industrial organic chemicals.....	81	49	25.2	332.4	15.6	30.7	182.2	1,924.4	1,422.3	3,339.2	266.6	-	-
2869	Industrial organic chemicals, n.e.c.	56	38	23.8	316.0	14.8	29.0	173.8	1,832.9	1,310.9	3,141.4	242.6	(NA)	(NA)
287	Agricultural chemicals.....	80	35	3.1	29.1	2.0	3.9	17.5	114.7	143.0	258.4	10.2	2.6	66.6
2873	Nitrogenous fertilizers.....	9	8	.6	7.4	.5	1.0	5.3	32.3	24.6	57.5	1.2	(NA)	(NA)
2874	Phosphatic fertilizers.....	8	7	1.0	10.6	.8	1.5	7.2	40.1	56.6	96.5	2.3	(NA)	(NA)
2875	Fertilizers, mixing only.....	28	■	.6	3.3	.3	.5	1.7	10.8	23.9	33.4	.9	.7	11.4
2879	Agricultural chemicals.....	35	12	.9	7.7	.5	.9	3.3	31.4	38.0	71.0	5.8	(NA)	(NA)
289	Miscellaneous chemical products..	189	54	5.6	54.1	3.6	6.3	29.5	169.5	144.6	312.5	10.6	3.1	91.1
29	Petroleum and coal products....	162	79	33.1	405.2	24.0	48.4	265.4	1,387.0	5,912.2	7,416.2	167.7	33.4	1,800.5
291	Petroleum refining.....	62	53	30.6	383.6	22.6	45.4	258.0	1,326.9	5,827.7	7,268.7	(D)	-	-
2911	Petroleum refining.....	62	53	30.7	383.6	22.6	45.4	258.0	1,326.9	5,827.7	7,268.7	(D)	31.0	1,765.1
295	Paving and roofing materials.....	45	20	2.1	18.1	1.2	2.6	9.0	49.5	59.6	108.7	1.5	EE	(D)
2951	Paving mixtures and blocks.....	25	5	.3	2.3	.2	.5	1.6	7.5	11.4	18.9	.4	.6	9.0
2952	Asphalt felts and coatings.....	20	15	1.8	15.8	.9	2.1	7.4	42.0	48.2	89.8	1.1	EE	(D)

See footnotes at end of table.

TABLE 3. General Statistics for the State, by Industry Groups and Industries: 1972 and 1967—Continued

(See appendix, Explanation of Terms)

Code	Industry	1972											1967	
		Establishments		All employees		Production workers			Value added by manufacture	Cost of materials <sup>1</sup>	Value of shipments <sup>1</sup>	Capital expenditures, new	All employees	Value added by manufacture
		Total	With 20 employees or more	Number	Payroll	Number	Man-hours	Wages						
		(number)	(number)	(1,000)	(million dollars)	(1,000)	(million)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(1,000)	(million dollars)
29	Petroleum, coal products--Con.													
299	Misc. petroleum and coal products.	52	6	.5	4.4	.3	.6	2.3	10.6	24.9	38.8	(D)	BB	(D)
30	Rubber and misc. plastics prod..	366	137	16.0	127.3	12.8	25.5	88.4	354.5	304.2	647.8	37.2	9.1	145.6
3069	Fabricated rubber products, n.e.c...	38	20	2.5	17.6	2.0	3.9	12.4	37.7	31.6	69.2	1.0	(D)	(D)
307	Miscellaneous plastics products...	314	112	10.4	78.8	8.3	16.7	51.7	228.4	188.1	406.0	27.6	-	-
3079	Miscellaneous plastics products.....	314	112	10.4	78.8	8.3	16.7	51.7	228.4	188.1	406.0	27.6	(NA)	(NA)
314	Footwear, except rubber.....	31	16	2.7	13.9	2.3	4.4	10.3	28.0	23.3	49.8	1.0	EE	(D)
3144	Women's footwear, except athletic...	12	7	.8	3.1	.7	1.2	2.4	4.4	4.8	9.5	.2	(NA)	(NA)
317	Handbags and personal leather goods	23	5	.6	2.6	.5	.9	2.0	5.5	6.6	12.0	.4	.3	2.7
3171	Women's handbags and purses.....	20	5	.5	2.5	.5	.9	1.9	5.2	6.3	11.3	.4	AA	(D)
319	Leather goods, n.e.c.....	38	7	.4	2.5	.4	.7	1.7	5.6	4.8	10.4	(D)	-	-
3199	Leather goods, n.e.c.....	38	7	.4	2.5	.4	.7	1.7	5.6	4.8	10.4	(D)	(NA)	(NA)
32	Stone clay, and glass products..	858	314	29.6	230.6	23.4	49.9	168.9	606.1	504.7	1,105.3	62.3	26.3	366.4
322	Glass, glassware, pressed or blown	13	5	2.0	17.7	1.8	3.3	14.8	41.8	19.8	60.8	2.3	EE	(D)
3221	Glass containers.....	4	4	1.9	17.1	1.7	3.2	14.3	40.6	19.3	59.1	2.0	2.0	29.3
324	Cement, hydraulic.....	20	19	2.8	29.7	2.2	4.5	21.4	120.3	54.9	174.6	19.8	-	-
3241	Cement, hydraulic.....	20	19	2.8	29.7	2.2	4.5	21.4	120.3	54.9	174.6	19.8	2.9	76.6
325	Structural clay products.....	60	44	4.0	26.0	3.3	6.7	18.8	55.5	30.2	83.9	3.4	5.1	43.4
3251	Brick and structural clay tile.....	38	26	2.1	12.9	1.8	3.9	10.0	28.1	9.2	40.4	1.8	3.2	25.1
326	Pottery and related products.....	23	6	1.2	7.4	.9	1.8	6.0	16.8	6.5	23.4	1.1	CC	(D)
327	Concrete, gypsum, plaster products	521	175	14.0	105.9	10.9	24.3	76.4	248.1	303.8	553.6	24.5	10.9	144.7
3271	Concrete block and brick.....	34	17	.9	5.2	.7	1.4	3.8	11.6	11.9	23.3	.8	.8	9.3
3272	Concrete products, n.e.c.....	190	58	4.7	34.2	4.0	9.1	26.2	76.2	64.6	140.7	6.6	3.8	39.2
3273	Ready-mixed concrete.....	278	85	6.4	49.2	4.7	10.5	34.1	114.3	190.7	307.0	15.0	4.7	69.7
3274	Lime.....	7	6	.5	3.7	.4	.9	2.6	9.5	4.5	13.9	.6	.7	6.8
3275	Gypsum products.....	12	8	1.4	13.5	1.1	2.4	9.7	36.5	32.1	68.8	1.4	.9	19.7
328	Cut stone and stone products.....	53	11	.6	4.3	.5	.9	3.2	7.1	4.6	11.6	.4	-	-
3281	Cut stone and stone products.....	53	11	.6	4.3	.5	.9	3.2	7.1	4.6	11.6	.4	.4	3.5
329	Misc. nonmetallic mineral products	144	47	4.6	36.6	3.6	7.7	26.2	107.3	77.1	180.8	10.4	3.9	56.6
3292	Asbestos products.....	8	4	1.2	10.3	.9	2.0	7.6	35.8	26.9	59.9	1.9	(NA)	(NA)
3295	Minerals, ground or treated.....	48	16	.8	6.1	.6	1.4	4.4	15.6	14.9	30.3	2.9	.9	11.3
3296	Mineral wool.....	11	7	1.0	8.6	.8	1.6	6.3	34.6	20.4	55.0	4.0	-	-
33	Primary metal industries.....	249	131	33.9	317.4	27.1	53.1	231.2	805.0	1,015.1	1,827.9	82.0	36.8	639.0
332	Iron and steel foundries.....	58	35	7.8	62.4	6.6	13.1	48.0	114.0	63.5	175.7	7.4	7.9	75.9
3321	Gray iron foundries.....	37	24	5.4	42.5	4.5	9.0	33.6	78.8	50.9	128.2	5.2	5.2	52.8
3325	Steel foundries, n.e.c.....	13	8	1.1	9.0	.9	1.9	6.4	15.9	7.1	22.0	.4	(NA)	(NA)
334	Secondary nonferrous metals.....	19	8	.9	7.3	.7	1.3	4.9	29.3	45.6	74.7	1.3	-	-
3341	Secondary nonferrous metals.....	19	8	.9	7.3	.7	1.3	4.9	29.3	45.6	74.7	1.3	.6	6.1
335	Nonferrous rolling and drawing....	28	18	2.5	20.9	2.0	4.2	15.4	53.0	197.2	249.8	5.6	2.3	41.4
3357	Nonferrous wire drawing and insulating	8	7	1.4	12.1	1.1	2.3	8.8	29.6	75.8	105.5	2.9	EE	(D)
336	Nonferrous foundries.....	56	18	.9	6.3	.8	1.6	4.8	10.7	11.4	22.2	.8	1.4	12.7
3361	Aluminum foundries.....	38	9	.5	3.4	.4	.9	2.7	5.8	4.2	10.0	.6	.6	5.0
3362	Brass, bronze, and copper foundries.	14	7	.4	2.6	.4	.7	1.9	4.3	6.9	11.3	.1	BB	(D)
339	Misc. Primary metal products.....	25	12	.7	5.5	.5	1.0	3.6	10.6	6.5	16.8	1.4	5.8	84.5
34	Fabricated metal products.....	1,423	544	70.2	598.3	52.3	106.9	396.3	1,166.5	1,259.7	2,382.1	73.2	45.6	571.9
341	Metal cans and shipping containers	36	29	3.9	41.3	3.3	6.9	33.0	131.2	187.1	318.6	6.5	-	-
3411	Metal cans.....	24	20	3.1	34.0	2.6	5.6	27.8	116.8	162.5	279.2	5.9	2.5	57.8
3412	Metal barrels, drums, and pails.....	12	9	.8	7.3	.7	1.3	5.2	14.4	24.6	39.4	.7	.7	12.0
342	Cutlery, handtools and hardware...	52	9	.6	4.3	.5	.9	2.7	8.4	8.5	16.9	.2	.7	9.0
344	Fabricated structural metal prod..	696	285	29.4	236.6	22.3	44.6	151.7	413.1	579.9	986.1	17.5	25.0	267.7
3441	Fabricated structural metal products	131	80	8.4	68.6	6.3	13.7	46.1	106.2	179.7	292.8	5.2	7.6	81.1
3443	Fabricated platework boilers shop:..	121	83	8.1	73.8	6.0	12.7	51.0	128.6	132.1	255.3	8.9	8.8	97.2
3444	Sheet metalwork.....	215	46	3.8	30.8	2.9	5.8	20.7	56.2	58.6	113.1	2.0	2.8	28.0
3446	Architectural metalwork.....	85	8	1.0	7.9	.7	1.5	5.1	14.7	14.9	29.5	.5	.6	7.5

See footnotes at end of table.



TABLE 3. General Statistics for the State, by Industry Groups and Industries: 1972 and 1967—Continued

(See appendix, Explanation of Terms)

Code	Industry	1972											1967	
		Establishments		All employees		Production workers			Value added by manufacture	Cost of materials <sup>1</sup>	Value of shipments <sup>1</sup>	Capital expenditures, new	All employees	Value added by manufacture
		Total (number)	With 20 employees or more (number)	Number (1,000)	Payroll (million dollars)	Number (1,000)	Man-hours (million)	Wages (million dollars)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(1,000)	(million dollars)
34	Fabricated metal products--Con.													
345	Screw machine products, bolts, etc.	30	11	.7	5.4	.6	1.2	3.6	11.4	10.8	22.0	.3	1.0	11.8
3451	Screw machine products.....	15	6	.3	2.1	.2	.4	1.5	3.8	2.3	6.1	.2	BB	(D)
3452	Bolts, nuts, rivets, and washers..	15	5	.5	3.3	.4	.7	2.1	7.6	8.4	15.9	.2	CC	(D)
346	Metal forgings and stampings....	68	31	2.7	23.6	2.3	4.8	17.7	48.6	47.0	95.7	2.3	-	-
3462	Iron and steel forgings.....	21	16	1.5	14.4	1.2	2.6	11.1	33.0	36.2	69.2	1.6	EE	(D)
3469	Metal stampings, n.e.c.....	44	12	.7	4.9	.6	1.1	3.4	9.3	6.4	15.7	(D)	(NA)	(NA)
3479	Metal coating and allied services.	92	26	2.3	16.9	1.9	3.6	11.9	36.9	13.8	50.2	1.8	1.4	15.1
348	Ordinance and accessories, n.e.c.	23	10	9.6	78.6	6.5	12.5	44.5	114.8	98.4	202.8	9.9	-	-
349	Misc. fabricated metal products.	291	109	17.9	169.7	12.7	26.2	109.1	338.1	274.5	603.8	22.3	FF	(D)
3494	Valves and pipe fittings.....	70	43	11.0	109.3	7.5	15.9	68.3	211.3	166.1	361.1	16.1	5.7	81.4
3496	Misc. fabricated wire products....	59	17	1.7	12.3	1.3	2.6	7.4	23.4	26.3	49.6	2.0	(NA)	(NA)
3498	Fabricated pipe and fittings.....	37	23	2.4	25.9	1.8	3.6	18.3	58.4	49.0	106.0	2.4	2.6	46.0
3499	Fabricated metal products, n.e.c..	114	22	2.1	16.9	1.5	3.0	11.4	32.5	25.6	67.5	1.6	.6	6.4
35	Machinery, except electrical..	1,956	463	68.4	623.1	47.5	97.8	374.4	1,389.2	1,057.8	2,390.4	60.5	55.3	773.6
351	Engines and turbines.....	17	9	1.3	12.0	.7	1.5	5.9	25.1	39.3	61.2	1.1	AA	(D)
352	Farm and garden machinery.....	91	29	1.9	13.4	1.5	2.6	8.6	27.6	29.1	56.4	.9	-	-
353	Construction and related mach....	256	142	28.0	260.8	19.4	40.7	163.3	555.9	378.3	913.7	24.0	24.9	375.1
3535	Conveyors and conveying equipment.	18	13	1.4	9.8	.9	2.0	5.6	17.5	17.4	34.5	.3	1.0	11.8
354	Metalworking machinery.....	133	21	2.5	23.1	1.8	3.9	13.9	48.4	20.2	68.1	2.3	2.8	44.6
3544	Special dies, tools, jigs, fixtures.	80	6	.5	5.1	.4	.9	3.8	9.0	3.3	12.3	.8	.8	11.2
3545	Machine tool accessories.....	20	3	.3	2.2	.2	.4	1.4	4.2	1.4	5.8	.5	(NA)	(NA)
355	Special industry machinery.....	109	33	3.5	30.9	2.3	4.5	17.8	65.5	46.5	110.9	2.5	3.8	45.5
3551	Food products machinery.....	29	8	.7	5.4	.5	.9	2.9	10.4	9.3	20.3	.3	.6	7.3
3559	Special industry machinery, n.e.c.	50	16	1.9	16.1	1.2	2.3	9.5	30.4	24.4	53.7	1.6	2.3	24.3
356	General industrial machinery....	162	52	5.8	51.2	4.1	8.4	31.1	100.3	93.2	188.1	4.1	4.8	72.4
3569	General industrial machinery, n.e.c.	38	12	1.1	8.1	.8	1.6	4.9	15.7	12.2	27.7	.6	.9	9.1
357	Office and computing machines...	38	13	5.6	66.2	2.6	5.6	22.4	176.6	94.5	267.7	7.8	CC	(D)
358	Refrigeration, service machinery.	127	59	10.8	86.7	7.8	15.6	52.6	243.8	295.2	514.6	11.1	9.5	128.3
359	Misc. machinery, exc. electrical.	1,023	105	9.1	78.8	7.2	14.9	58.9	146.1	61.5	209.6	5.9	-	-
36	Electric, electronic equipment.	466	174	54.6	481.3	36.0	74.3	264.7	902.8	629.5	1,504.3	73.2	45.9	492.9
361	Electric distributing equipment..	35	15	1.5	12.0	1.1	2.2	7.9	26.5	32.7	58.6	.8	3.1	46.7
3613	Switchgear and switchboard apparatus	25	14	1.3	11.1	.9	1.9	7.3	24.8	30.8	55.0	.8	EE	(D)
362	Electrical industrial apparatus.	61	18	1.2	8.7	.9	1.5	4.2	23.9	23.2	46.1	2.9	EE	(D)
3622	Industrial controls.....	37	11	.5	3.3	.4	.8	1.8	18.0	81.	15.5	1.8	.7	8.2
363	Household appliances.....	23	9	1.3	8.0	1.1	2.1	5.8	18.5	24.1	42.3	.8	.4	4.9
3631	Household cooking equipment.....	4	1	.3	1.6	.2	.4	1.1	3.3	5.1	8.2	.1	(NA)	(NA)
3634	Electric housewares and fans.....	9	3	.6	3.1	.5	.9	2.2	6.7	12.3	19.0	.4	BB	(D)
364	Elect. lighting and wiring equip..	58	27	3.4	22.1	2.3	4.5	13.4	59.2	51.1	106.1	4.1	1.5	18.3
3646	Commercial lighting fixtures.....	5	4	.6	3.3	.5	.8	2.3	7.7	10.6	17.6	.3	(NA)	(NA)
369	Misc. electrical equip., supplies	76	24	3.1	24.2	2.5	5.0	17.2	52.0	53.3	101.3	7.6	1.7	22.2
3691	Storage batteries.....	17	8	1.6	13.7	1.4	2.9	10.6	30.6	32.7	58.9	7.1	CC	(D)
3694	Engine electrical equipment.....	8	3	.3	2.1	.3	.5	1.5	3.4	3.4	6.9	.2	.2	1.4
37	Transportation equipment.....	546	201	70.5	732.1	46.7	92.5	427.0	1,325.7	1,507.9	2,956.6	55.1	80.4	1,248.1
371	Motor vehicles and equipment....	198	65	11.0	102.2	9.1	18.4	77.7	288.6	645.4	933.0	8.3	FF	(D)
3713	Truck and bus bodies.....	35	13	1.0	6.9	.8	1.6	4.9	13.2	20.5	33.2	.5	.9	9.0
3714	Motor vehicle parts and accessories	131	35	3.0	21.1	2.4	4.7	14.7	48.4	53.6	99.4	2.9	1.8	20.2
373	Ship, boat building, repairing ...	135	43	12.6	107.2	10.5	21.6	82.3	128.1	131.3	260.5	26.9	9.0	92.0
379	Misc. transportation equipment..	138	48	4.7	31.0	4.0	7.6	23.1	61.4	108.5	167.0	8.1	3.0	29.9
38	Instruments and related prod...	246	69	11.8	82.4	7.7	14.6	45.6	232.3	125.4	349.5	9.2	FF	(D)
381	Engineering, scientific instru...	38	15	1.5	13.2	.9	1.7	7.3	21.5	13.1	34.7	.8	-	-
3811	Engineering, scientific instruments	38	15	1.5	13.2	.9	1.7	7.3	21.5	13.1	34.7	.8	2.8	31.7
382	Measuring and controlling devices	87	26	3.4	27.7	2.1	4.0	13.1	69.0	38.2	104.4	2.3	1.3	22.8
3825	Instruments to measure electricity	31	9	1.3	11.6	.7	1.4	5.1	20.3	14.0	34.8	.5	EE	(D)
3829	Measuring, controlling devices, nec.	38	8	1.4	10.1	.9	1.7	4.9	28.5	17.0	43.3	1.5	(NA)	(NA)

See footnotes at end of table.

TABLE 3. General Statistics for the State, by Industry Groups and Industries: 1972 and 1967—Continued

(See appendix, Explanation of Terms)

Code	Industry	1972											1967	
		Establishments		All employees		Production workers			Value added by manufac- ture	Cost of materials <sup>1</sup>	Value of shipments <sup>1</sup>	Capital expendi- tures, NEW	All employees	Value added by manufac- ture
		Total	With 20 employees or more	Number	Payroll	Number	Man-hours	Wages	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(1,000)	(million dollars)
		(number)	(number)	(1,000)	(million dollars)	(1,000)	(million)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(1,000)	(million dollars)
38	Instruments and related prod- ucts--Con.													
383	Optical instruments and lenses...	12	3	.6	4.2	.5	1.0	3.0	9.6	3.1	12.9	(D)	-	-
3832	Optical instruments and lenses.....	12	3	.6	4.2	.5	1.0	3.0	9.6	3.1	12.9	(D)	-	-
385	Ophthalmic goods.....	29	11	2.9	13.5	1.8	2.7	7.6	40.6	19.0	55.5	2.6	-	-
3851	Ophthalmic goods.....	29	11	2.9	13.5	1.8	2.7	7.6	40.6	19.0	55.5	2.6	.5	4.6
39	Misc. manufacturing industries.	571	110	10.0	62.1	7.8	14.6	41.4	133.1	97.2	227.3	6.9	6.5	59.6
394	Toys and sporting goods.....	107	28	3.2	17.9	2.5	5.0	12.2	38.3	27.1	63.8	2.8	1.9	16.5
3949	Sporting and athletic goods, n.e.c.	78	22	2.5	14.1	1.9	3.8	9.4	30.5	21.5	50.6	1.9	1.3	13.0
395	Pens, pencils, office, art goods.	41	5	.4	2.7	.3	.6	1.6	7.2	4.5	11.7	.2	.3	3.5
399	Miscellaneous manufactures.....	359	65	4.7	32.1	3.6	6.6	20.9	61.8	45.1	106.7	2.4	3.5	31.3
3991	Brooms and brushes.....	30	6	.4	1.6	.3	.6	1.3	2.6	3.9	6.4	.4	.5	1.9
3993	Signs and advertising displays.....	196	33	2.4	19.2	1.9	3.3	12.9	37.1	19.9	57.0	1.2	1.6	17.5
3995	Burial caskets.....	10	7	.3	2.6	.2	.5	1.2	5.0	6.5	11.5	-	.6	5.8
3999	Manufacturing industries, n.e.c....	123	19	1.5	8.7	1.2	2.2	5.5	17.1	14.9	31.8	.8	.9	6.0
60	Administrative and auxiliary...	428	186	28.5	400.4	-	-	-	-	-	-	-	20.7	-

Note: The following symbols indicate employment size range for 1967:

AA less than 250 employees

BB 250 to 499 employees

CC 500 to 999 employees

EE 1,000 to 2,499 employees

FF 2,500 employees and over

- Represents zero. (NA) Not available. (D) Withheld to avoid disclosing figures for individual companies.

<sup>1</sup>The total cost of materials and value of shipments for industry groups shown may include extensive duplication arising from shipments between establishments in the same industry classification. (For a more complete explanation, see appendix.)<sup>2</sup>Includes figures for industry groups which have been withheld from publication in order to (a) avoid disclosing figures for individual companies or (b) permit further checking of figures for smaller industry groups. Additional detail will appear in the final report for this State.



## Appendix A. SCOPE AND COVERAGE

This report is one of a series presenting preliminary information, by State, from the 1972 Census of Manufactures. The data will be superseded in a final report which, in turn, will be included in *Volume III, Area Statistics, 1972 Census of Manufactures*. The final report will include a comprehensive discussion of the concepts and definitions used in the census.

The census of manufactures covers each manufacturing establishment in the United States with one paid employee or more; manufacturing establishments with no employees are excluded. Firms which operated more than one establishment were required to file a separate report for each location. Companies which engaged in distinctly different lines of activity at one location were asked to submit separate reports if the company records permitted such a separation and the activities were of significant size.

This report includes figures for administrative offices, warehouses, garages, or other auxiliary units which service manufacturing establishments.

In the 1972 census, the approximately 120,000 manufacturing establishments with fewer than 10 employees were excused from filing reports. Under special arrangements which safeguarded the confidentiality of both tax and census records, data on payrolls, sales, and industry classification from the administrative records of the Social Security Administration and the Internal Revenue Service were made available to the Census Bureau for use in the 1972 Economic Censuses (retail and wholesale trade, service industries, construction industries, manufactures, and mineral industries). Estimates for data other than payrolls and sales for these small establishments were constructed from industry averages. The effect on industry aggregates is slight in most industries. For manufacturing as a whole, these small establishments account for less than 3 percent of the payrolls and value added.

Establishments are classified by industry in accordance with industry definitions described in the 1972 edition of the Standard Industrial Classification (SIC) Manual. For 1972, the SIC was significantly revised and the comparability with prior year's data for some industries was significantly affected. The comparability at the 2- and 3-digit SIC levels was less affected. The final volumes of the 1972 Census of Manufactures will contain a table relating aggregates based on the 1972 SIC with aggregates derived from classifying establishments according to the 1967 SIC definitions.

As in earlier censuses, a number of small establishments may have been misclassified as to industry. However, such possible misclassifications have significant effect on *none* of the statistics except the number of establishments. As indicated above, report forms were not mailed to very small establishments (fewer than 10 employees). The industry classifications for these establishments were assigned on the basis of brief descriptions of the general activity of the establishment. Where the description is incomplete or there are relatively fine lines of demarcation among industries or between manufacturing and nonmanufacturing activity, the code assigned to an establishment could differ from that which would have been assigned on the basis of more complete product information. Therefore, the total establishment count for individual industries should be viewed as an approximation rather than a precise measurement. The counts for establishments with 20 employees or more are more reliable than the total number of establishments.

More detailed figures for this State will appear in the final census reports. Final reports will also include a comprehensive discussion of such concepts as "industry" and "establishment," as well as the various statistical items such as "employment," "value of shipments," and "value added." Similar preliminary and final reports will be issued for other States during the coming months. A series of preliminary summary reports showing U.S. totals for each manufacturing industry and for each State are being issued. Final industry reports and final area reports will be published during 1974.

Order forms describing the individual reports and listing their prices may be obtained from any U.S. Department of Commerce district office or from the Publications Distribution Section, Social and Economic Statistics Administration, Washington, D.C. 20233.

The 1972 Census of Manufactures is the 29th census of manufacturing establishments in the United States. For 1972, it was conducted jointly with the censuses of mineral industries, construction industries, retail trade, wholesale trade, and selected services under authority of Title 13 of the United States Code. Title 13 specifies that a census of manufactures be conducted every 5 years and, as amended, to cover years ending in "2" and "7". Title 13 also authorizes an annual sample survey of manufacturing establishments in interim years.



## Appendix B. EXPLANATION OF TERMS

*(For a more complete discussion of these terms and the method of compiling the Census of Manufactures, see the "Introduction" to the 1967 Census of Manufactures, Volume III).*

**All Employees**—All full-time and part-time employees on the payrolls of operating manufacturing establishments for any part of the pay period ending nearest the 12th of the months specified on the report form. Included are all persons on paid sick leave, paid holidays, and paid vacations during these pay periods. Officers of corporations are included as employees; proprietors and partners of unincorporated firms are excluded. The "all employee" number is the average number of production workers for the midmonth payroll period of March, May, August, and November plus the number of nonproduction employees in mid-March.

**Number of Production Workers**—Workers (up through the working foreman level) engaged in fabricating, processing, assembling, inspecting, receiving, packing, warehousing, shipping (but not delivering), and maintenance, repair, janitorial, and watchman services, product development, auxiliary production for plant's own use (e.g., powerplant), recordkeeping, and other closely associated services. Proprietors and partners are excluded.

**Payroll**—This item includes all forms of compensation such as salaries, wages, commissions, dismissal pay, bonuses, vacation and sick leave pay, and compensation in kind, prior to such deductions as employees' Social Security contributions, withholding taxes, group insurance, union dues, and savings bonds. The total includes salaries of officers of these establishments, if a corporation; it excludes payments to the proprietor or partners, if an unincorporated concern. Respondents were told that in reporting they could follow the definition of payrolls used for calculating the Federal withholding tax.

**Man-Hours of Production Workers**—This total relates to production-worker man-hours worked or paid for at the plant including actual overtime hours (not straight-time equivalent hours). It excludes hours paid for vacation, holidays, or sick leave when the employee was not at the plant.

**Cost of Materials**—The term "Cost of Materials" refers to charges actually paid or payable for items consumed or put into production during the year, including freight and other direct charges incurred by the establishment in acquiring these materials. It includes the cost of materials or fuel consumed regardless of

whether these items were purchased by the establishment from other companies, transferred to it from other establishments of the same company, or withdrawn from inventory during the year. The establishment was requested to value materials transferred from other parts of the company at its approximate market value, not at cost of production. The important components of this cost item are (a) all raw materials, semifinished goods, parts, components, containers, scrap, and supplies put into production or used as operating supplies and for repair and maintenance during the year; (b) electric energy purchased; (c) fuels consumed for heat, power, or the generation of electricity; (d) work done by others on materials or parts furnished by manufacturing establishments (contract work); and (e) products bought and resold in the same condition.

**Value of Shipments**—The value of shipments is the received or receivable net selling value, f.o.b. plant (exclusive of freight and taxes), of all products shipped, both primary and secondary, as well as all miscellaneous receipts such as receipts for contract work performed for others, installation and repair, sales of scrap, and sale of products bought and resold without further processing. Included are all items made by the establishment or for it under contract from materials owned by it whether sold, transferred to other plants of the same company, or shipped on consignment. The net selling value of products made in one plant on a contract basis from materials owned by another was reported by the plant providing the materials.

In the case of multiunit companies, the manufacturer was requested to report the value of products transferred to other establishments of the same company at full economic value; i.e., to include not only the direct costs of production but also a reasonable proportion of "all other costs" (including company overhead) and profit.

**Duplication in Cost of Materials and Value of Products**—The aggregate cost of materials and value-of-shipments figures for industry groups and for all manufacturing industries may include large amounts of duplication since the products of some industries are used as materials by others. With some important exceptions, such as motor vehicles and parts, this duplication is not significant within individual industries but arises from the addition of the totals of related industries in successive stages of the production of a finished manufactured product. Examples are the addition of flour mills to bakeries in the food group and the addition of pulp mills to paper mills in the paper and allied products group of industries. Esti-



mates of this duplication indicate that the value of manufactured products exclusive of such duplication—the value of finished manufactures—approximates two-thirds of the total value of products.

Prior to 1962, the Bureau of the Census did not publish figures for cost of materials or value of shipments if they contained significant duplication. Effective with the 1962 annual survey these figures were shown at all industry levels for the United States to meet the requests for their use in studies in which the presence of an indeterminate amount of duplication is not a limiting factor. However, they are appropriately footnoted. Effective with the 1964 annual survey, these industry group totals are also shown at the State, standard metropolitan statistical area, and large-county level.

Even where there is no significant amount of duplication, value-of-shipments figures are deficient as measures of the relative economic importance of individual manufacturing industries or geographic areas because of the wide variation in ratio of materials, labor, and other processing costs to value of shipments among industries.

**Value Added by Manufacture**—This measure of manufacturing activity is derived by subtracting the cost of materials, supplies, containers, fuel, purchased electricity, and cost of resales contract work from the value of shipments for products manufactured plus resales and receipts for services rendered. The result of this calculation is adjusted by the net change in finished goods and work-in-process inventories between the beginning and end of the year. (In the few industries that report value of production rather than value of shipments, only changes in work-in-process inventories are used to adjust value added. In the shipbuilding and repairing industry, no inventory adjustment is made.)

“Value added” avoids the duplication in the value of shipments figure which results from the use of products of some establishments as materials by others. Value added is considered to be the best value measure available for comparing the relative economic importance of manufacturing among industries and geographic areas.

**Expenditures for Plant and Equipment**—Manufacturing establishments in operation and establishments under construction but not yet in operation, were asked to report their expenditures for (a) permanent additions and major alterations to the manufacturing establishment, and (b) new machinery and equipment used for replacement purposes and additions to plant capacity if they are of the type for which depreciation accounts are ordinarily maintained.

These totals exclude expenditures for new facilities and equipment leased from nonmanufacturing concerns; new facilities owned by the Federal Government but operated under contract by private companies; and plant and equipment furnished to the manufacturer by communities and nonprofit organizations. Expenditures for used plant and equipment (although reported in the census), expenditures for land, and cost of maintenance and repairs charged as current operating expense are also omitted from the figures for new capital expenditures.

**Central Administrative Offices and Auxiliary Units**—In the 1972 census as in previous years, respondents were asked to file separate reports for central administrative offices or auxiliary units which were (1) at different locations from the establishments served or, (2) at the same location as one of these establishments but were not operated as an integral part thereof and served two or more establishments. The functions of employees in central administrative offices include general company policy determination, planning and management (that is, company purchasing, accounting, general engineering, direction of company personnel matters, and legal and patent matters). Auxiliaries are storage facilities, garages, repair shops, purchasing offices, sales promotion offices, and research laboratories serving the plants or central management of the company.

**Standard Metropolitan Statistical Areas**—Standard metropolitan statistical areas (SMSA) are integrated economic and social units with a large volume of daily travel and communication between the central city and outlying parts of the area.<sup>1</sup> Each area (except in New England) consists of one whole county or more. An area may contain not only highly industrialized counties but also adjoining counties which, though primarily residential in character, contribute significantly to the industrial counties' labor force and are socially and economically integrated with the central city. These areas are defined by the Federal Committee on Standard Metropolitan Statistical Areas of the Office of Management and Budget for general-purpose use throughout the Federal Government in presenting economic and social data. In the New England States, similar intergration criteria are applied in defining

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<sup>1</sup> Each standard metropolitan statistical area must include either (1) a city with 50,000 or more inhabitants, or (2) a city having a population of at least 25,000 which (a) with the addition of the population of contiguous places has a population density of at least 1,000 persons per square mile; (b) constitutes, for general economic and social purposes, a single community with a combined population of at least 50,000; and (c) includes a total population of at least 75,000 in the county or counties in which the city and contiguous places are located.

SMSA's on a city and town basis because towns rather than counties are regarded as the significant unit in this region of the country.

The requirement that each SMSA consist of county units (except in New England) sometimes results in the inclusion in an area of considerable amount of territory which would not ordinarily be considered "metropolitan," much less "industrial." It is recognized that metropolitan areas could be more accurately defined in terms of smaller area segments such as minor civil

divisions, but the usefulness of areas so defined would be limited by the fact that many types of economic and social data are available only on a county basis.

Each SMSA is designated by the name of the principal city of the area. In addition to the name of the principal city, the area title may include one or two additional city names.

The data for SMSA's which changed definition since the 1967 census have not been retabulated on the new basis for years prior to 1972.







PRELIMINARY REPORT

# 1972 CENSUS OF MANUFACTURES

## AREA SERIES

C72(P)-S45

U. S. DEPARTMENT OF COMMERCE • Social and Economic Statistics Administration • BUREAU OF THE CENSUS

ued February 1974

### Utah

Value added by manufacturing in 1972 in the State of Utah amounted to \$1,006 million, a 16-percent increase from 1971 and a 29-percent increase from 1967.

This report presents preliminary results from the 1972 Census of Manufactures for the State, its Standard Metropolitan Statistical Area, and its counties.

Data are provided for industry groups within the State. Historical data, back to 1958, are included for the State as a whole,

and 1967 figures on employment and value added are provided for the smaller areas.

The figures in this report have been subjected to only preliminary review and must be regarded as approximations of the final census figures. No adjustments have been made in the value figures for changes in price level.

For an explanation of the terms used in the tables, see the appendix at the end of this report.

TABLE 1. General Statistics for the State: 1972 and Earlier Years

(See appendix, Explanation of Terms)

Year	Establishments		All employees <sup>1</sup>		Production workers			Value added by manufacture	Cost of materials <sup>2</sup>	Value of shipments <sup>2</sup>	Capital expenditures, new
	Total	With 20 employees or more	Number	Payroll	Number	Man-hours	Wages				
	(number)	(number)	(1,000)	(million dollars)	(1,000)	(millions)	(million dollars)				
	UTAH										
1972 Census .....	1,352	426	53.9	455.3	37.3	70.9	274.1	1,005.9	1,533.9	2,520.5	80.8
1971 ASM .....	(NA)	(NA)	49.5	391.4	33.5	63.3	223.0	864.2	1,388.1	2,257.9	71.9
1970 ASM .....	(NA)	(NA)	51.1	376.3	34.8	66.5	216.7	989.9	1,465.9	2,428.7	58.3
1969 ASM .....	(NA)	(NA)	50.0	353.5	34.8	67.9	212.5	1,054.6	1,071.0	2,122.6	50.7
1968 ASM .....	(NA)	(NA)	47.8	331.3	32.8	63.9	195.1	826.6	990.5	1,819.0	39.0
1967 Census .....	1,124	353	47.0	314.9	31.7	62.3	182.7	777.9	911.2	1,672.8	59.2
1966 ASM .....	(NA)	(NA)	47.2	311.2	31.7	63.5	184.4	699.4	1,038.0	1,736.6	53.1
1965 ASM .....	(NA)	(NA)	47.7	305.1	31.1	61.7	176.4	693.2	995.8	1,691.7	25.1
1964 ASM .....	(NA)	(NA)	51.5	318.1	33.2	66.5	182.1	668.0	960.0	1,610.8	23.0
1963 Census .....	1,110	336	53.5	328.2	33.4	67.0	182.0	710.6	(NA)	(NA)	29.6
1962 ASM .....	(NA)	(NA)	50.4	303.0	31.2	61.6	163.4	685.3	(NA)	(NA)	40.0
1961 ASM .....	(NA)	(NA)	46.4	272.3	29.9	59.6	153.2	631.5	(NA)	(NA)	35.9
1960 ASM .....	(NA)	(NA)	44.7	244.2	29.6	58.2	146.3	547.4	(NA)	(NA)	33.8
1959 ASM .....	(NA)	(NA)	39.4	209.4	27.3	53.0	126.7	457.0	(NA)	(NA)	29.5
1958 Census .....	1,000	296	37.6	185.9	26.7	52.1	120.8	417.4	(NA)	(NA)	31.3

Note: "ASM" data are based on a representative sample of manufacturing establishments canvassed in the Annual Survey of Manufactures. These estimates may differ from the results of a complete canvass of all manufacturing establishments. The standard errors associated with these estimates are published in the annual survey of manufactures volumes for this period. For comparative purposes, the 1972 ASM estimate for the State of Utah was 51 thousand employees and \$936 million value added with corresponding standard error of 3 and 2.

(NA) Not available.

<sup>1</sup>Includes employment and payroll at central administrative offices and auxiliary units. (For a definition of these units, see appendix.)

<sup>2</sup>The total cost of materials and value of shipments may include extensive duplication arising from shipments between establishments in the same industry classification. (For a more complete explanation, see appendix.)

TABLE 2. General Statistics for the State, Standard Metropolitan Statistical Areas, and Counties: 1972 and 1967

(See appendix, Explanation of Terms)

State, standard metropolitan statistical areas, and counties <sup>1</sup>	1972										1967		
	Establishments		All employees <sup>2</sup>		Production workers			Value added by manufac- ture	Cost of materials <sup>3</sup>	Value of shipments <sup>3</sup>	Capital expendi- tures, NMW	All employees	Value added by manufac- ture
	Total	With 20 employees or more	Number	Payroll	Number	Man-hours	Wages						
	(number)	(number)	(1,000)	(million dollars)	(1,000)	(million)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(1,000)	(million dollars)
UTAH, TOTAL. . . . .	1 352	426	53.9	455.3	37.3	70.9	274.1	1 005.9	1 533.9	2 520.5	80.8	47.0	777.9
STANDARD METROPOLITAN STATISTICAL AREAS <sup>4</sup>													
PROVO-OREM . . . . .	129	39	8.6	86.1	6.9	12.8	78.8	225.6	187.4	409.3	11.5	7.9	144.1
SALT LAKE CITY-OGDEN . . . . .	947	325	38.3	324.8	24.7	47.9	175.6	670.2	1 173.8	1 832.3	61.2	32.4	546.4
COUNTIES													
BOX ELDER. . . . .	23	6	1.2	6.0	1.1	1.7	5.0	16.3	13.7	29.1	1.1	2.3	38.2
CACHE. . . . .	63	19	2.1	14.6	1.7	3.3	10.9	37.0	95.1	130.5	3.8	1.3	18.1
DAVIS. . . . .	66	20	1.7	13.9	1.3	2.4	9.3	51.5	93.2	142.7	1.5	1.6	24.1
IRON. . . . .	17	1	.3	1.6	.2	.5	1.4	4.0	4.1	7.6	.1	.3	1.9
SALT LAKE. . . . .	746	254	31.3	269.6	19.6	37.6	139.7	533.9	954.9	1 473.5	55.8	26.0	457.9
SANPETE. . . . .	21	1	.7	3.4	.6	1.2	2.4	8.2	13.5	21.8	.9	.4	2.7
SEVIER. . . . .	22	4	.4	3.1	.3	.6	1.8	5.9	5.7	11.6	.3	.4	5.6
TOOELE. . . . .	15	5	.2	1.9	.2	.4	1.3	2.3	3.3	7.8	.3	(NA)	(NA)
UINTAH. . . . .	16	7	.3	1.8	.3	.4	1.4	4.1	2.0	6.1	.2	.1	1.2
UTAH. . . . .	129	39	8.6	86.1	6.9	12.8	78.8	225.6	187.4	409.3	11.5	7.9	144.1
WASHINGTON. . . . .	14	3	.3	1.8	.2	.5	1.1	3.7	9.2	11.5	.1	(Z)	.2
WEBER. . . . .	120	46	5.1	39.4	3.6	7.5	25.3	82.5	122.4	208.3	3.6	4.9	64.4

(NA) Not available. (Z) Less than half of the unit of measurement shown.

<sup>1</sup>Some counties were withheld from publication in order to (a) avoid disclosing figures for individual companies or (b) permit further checking of the figures for smaller counties. Additional detail will appear in the final report for this State.<sup>2</sup>Includes employment and payroll at central administrative offices and auxiliary units. (For a definition of these units, see appendix.)<sup>3</sup>The total cost of materials and value of shipments may include extensive duplication arising from shipments between establishments in the same industry classification. (For a more complete explanation, see appendix.)<sup>4</sup>The standard metropolitan statistical area in this State is defined as follows:

PROVO-OREM SMSA: Coextension with Utah County, UT.

SALT LAKE CITY-OGDEN SMSA: Consists of Davis, Salt Lake, Tooele, and Weber counties, UT.



TABLE 3. General Statistics for the State, by Industry Groups and Industries: 1972 and 1967

(See appendix, Explanation of Terms)

Code	Industry	1972										1967		
		Establishments		All employees		Production workers			Value added by manufacture	Cost of materials <sup>1</sup>	Value of shipments <sup>1</sup>	Capital expenditures, new	All employees	Value added by manufacture
		Total	With 20 employees or more	Number	Payroll	Number	Man-hours	Wages						
		(number)	(number)	(1,000)	(million dollars)	(1,000)	(million)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(1,000)	(million dollars)
	ALL INDUSTRIES, TOTAL <sup>2</sup> . . . .	1 352	426	53.9	455.3	37.3	70.9	274.1	1 005.9	1 533.9	2 520.5	80.8	47.0	777.9
20	FOOD AND KINDRED PRODUCTS. . . .	205	83	6.9	48.7	4.6	8.9	29.4	141.5	322.6	460.5	10.0	7.6	102.9
201	MEAT PRODUCTS. . . . .	38	17	1.2	8.6	1.0	2.0	7.0	34.8	106.9	141.1	1.0	1.5	18.6
2011	MEATPACKING PLANTS . . . . .	30	12	.8	5.8	.6	1.2	4.5	32.3	95.2	127.0	.7	1.1	15.1
202	DAIRY PRODUCTS . . . . .	40	19	1.9	14.3	1.0	1.9	7.0	40.1	99.7	138.1	4.0	1.6	24.9
2026	FLUID MILK . . . . .	17	8	1.1	8.9	.4	.7	2.8	24.5	53.8	78.0	1.6	1.0	16.7
203	PRESERVED FRUITS AND VEGETABLES. .	14	4	.3	1.7	.2	.5	1.1	3.4	6.5	9.9	.3	(NA)	(NA)
204	GRAIN MILL PRODUCTS. . . . .	25	7	.5	4.6	.4	.8	3.2	18.6	56.9	75.2	.5	.5	12.5
205	BAKERY PRODUCTS. . . . .	19	10	1.0	7.1	.6	1.2	4.3	13.5	14.0	27.5	.4	1.1	12.4
206	SUGAR AND CONFECTIONERY PRODUCTS .	16	6	.8	4.7	.7	1.3	3.7	11.1	14.5	24.9	1.0	(NA)	(NA)
208	BEVERAGES. . . . .	26	12	.7	4.3	.3	.5	1.4	10.8	12.7	23.4	2.1	.8	10.9
2086	BOTTLED AND CANNED SOFT DRINKS . .	25	12	.7	4.3	.3	.5	1.4	10.8	12.7	23.4	(D)	CC	(D)
209	MISC. FOODS AND KINDRED PRODUCTS .	21	6	.5	2.8	.3	.6	1.2	6.9	8.0	14.9	.6	(NA)	(NA)
2099	FOOD PREPARATIONS, NEC . . . . .	13	5	.4	2.6	.3	.5	1.1	6.5	7.7	14.2	.6	.3	3.1
23	APPAREL, OTHER TEXTILE PRODUCTS. .	77	43	4.8	23.2	4.4	7.5	19.4	35.8	33.8	67.4	1.0	3.2	18.2
233	WOMEN'S, AND MISSES' OUTERWEAR . .	24	18	1.7	5.7	1.6	2.4	4.9	12.7	7.4	20.0	.2	.9	6.1
2335	WOMEN'S AND MISSES' DRESSES. . . .	10	4	.5	1.8	.5	.6	1.5	3.0	2.9	5.9	(D)	AA	(D)
239	MISC. FABRICATED TEXTILE PRODUCTS. .	34	11	.7	4.0	.6	1.2	3.0	9.4	16.8	24.4	.4	.3	1.9
24	LUMBER AND WOOD PRODUCTS . . . .	106	20	2.0	12.6	1.7	3.0	9.2	25.1	29.7	53.6	1.0	(NA)	(NA)
243	MILLWORK, PLYWOOD, STRUC. MEMBERS .	42	9	.7	4.2	.6	1.0	2.8	7.3	8.3	15.5	.4	(NA)	(NA)
2431	MILLWORK . . . . .	14	3	.3	1.4	.2	.4	1.0	2.5	3.2	5.5	.1	(NA)	(NA)
2434	WOOD KITCHEN CABINETS. . . . .	23	6	.4	2.6	.3	.5	1.6	4.2	4.3	8.5	.3	(NA)	(NA)
25	FURNITURE AND FIXTURES . . . . .	43	15	1.0	7.1	.9	1.6	5.3	11.3	11.5	22.7	.3	.8	6.9
251	HOUSEHOLD FURNITURE. . . . .	25	10	.7	4.2	.6	1.1	3.3	6.9	7.2	14.0	.2	(NA)	(NA)
2512	UPHOLSTERED HOUSEHOLD FURNITURE. . .	6	5	.4	2.3	.3	.5	1.8	3.2	3.0	6.2	.1	(NA)	(NA)
27	PRINTING AND PUBLISHING. . . . .	181	29	3.7	28.6	2.4	4.5	17.8	62.0	43.4	104.9	3.9	2.9	34.7
2711	NEWSPAPERS . . . . .	34	8	1.1	8.4	.6	1.0	4.2	21.1	21.9	42.7	2.0	1.3	20.6
275	COMMERCIAL PRINTING. . . . .	90	11	1.6	13.1	1.1	2.0	8.7	19.7	13.6	33.2	.7	(NA)	(NA)
2752	COMMERCIAL PRINTING, LITHOGRAPHIC. .	35	7	.4	3.2	.3	.6	2.4	5.9	3.2	9.1	.4	(NA)	(NA)
2761	MANIFOLD BUSINESS FORMS. . . . .	5	4	.4	3.0	.3	.6	2.2	12.5	4.1	16.5	(D)	(NA)	(NA)
28	CHEMICALS AND ALLIED PRODUCTS. .	45	15	1.4	10.5	.9	2.0	6.0	30.0	25.5	54.5	2.2	.9	12.9
289	MISCELLANEOUS CHEMICAL PRODUCTS. .	13	6	.3	2.7	.3	.5	1.9	6.2	3.5	9.6	.4	(NA)	(NA)
29	PETROLEUM AND COAL PRODUCTS. . .	14	7	.8	9.1	.6	1.3	6.2	45.7	166.8	214.9	4.9	1.0	50.8
2911	PETROLEUM REFINING . . . . .	5	4	.6	7.6	.5	1.1	5.4	42.0	162.2	206.5	4.7	.9	49.5
30	RUBBER AND MISC. PLASTICS PROD. .	34	12	1.1	7.3	.9	1.8	5.2	15.7	9.6	25.1	1.2	(NA)	(NA)
32	STONE, CLAY, AND GLASS PRODUCTS .	95	33	2.4	19.7	1.8	3.6	14.5	54.5	38.7	93.0	12.4	2.1	33.5
327	CONCRETE, GYPSUM, PLASTER PRODUCTS	64	24	1.6	12.6	1.1	2.3	9.1	34.0	28.2	61.8	2.7	1.4	21.4
3272	CONCRETE PRODUCTS, NEC . . . . .	14	6	.5	4.1	.4	.8	3.0	9.7	7.7	17.1	.8	.4	5.4
3273	READY-MIXED CONCRETE . . . . .	30	10	.6	5.0	.4	.8	3.4	17.1	12.9	29.8	1.5	.6	9.0
34	FABRICATED METAL PRODUCTS. . . .	117	43	3.4	29.5	2.6	5.0	19.7	72.2	64.6	138.1	4.0	(NA)	(NA)
344	FABRICATED STRUCTURAL METAL PROD. .	71	33	2.5	21.3	1.9	3.6	14.2	57.1	51.5	106.1	3.5	1.8	35.3
3441	FABRICATED STRUCTURAL METAL PRODUCTS	25	14	1.1	9.7	.9	1.8	7.0	24.7	25.3	49.6	1.5	.6	6.1
3443	FABRICATED PLATEWORK (BOILER SHOPS).	12	7	.6	4.3	.4	.7	2.8	17.5	12.7	27.7	1.5	.8	22.8
3446	ARCHITECTURAL METALWORK. . . . .	11	3	.4	3.1	.3	.5	1.9	7.1	5.3	12.8	.1	.2	2.8
349	MISC. FABRICATED METAL PRODUCTS. .	16	3	.3	2.4	.2	.4	1.5	6.2	3.0	8.0	.2	(NA)	(NA)
35	MACHINERY, EXCEPT ELECTRICAL . .	126	24	4.7	40.5	3.2	5.9	24.4	96.8	61.3	144.2	2.4	4.4	53.3
356	GENERAL INDUSTRIAL MACHINERY . . .	13	4	.6	5.0	.4	.7	2.6	10.2	7.7	17.2	.2	1.5	19.1
358	REFRIGERATION, SERVICE MACHINERY .	7	4	.8	5.4	.5	1.1	3.6	14.0	8.7	22.6	.2	CC	(D)
359	MISC. MACHINERY, EXCEPT ELECTRICAL	64	5	.4	3.4	.3	.7	2.5	5.8	3.0	9.0	.4	(NA)	(NA)
36	ELECTRIC, ELECTRONIC EQUIPMENT . .	45	14	3.6	29.1	2.6	5.0	17.5	54.7	48.7	102.8	.8	(NA)	(NA)
366	COMMUNICATION EQUIPMENT. . . . .	14	5	2.6	21.8	1.7	3.2	11.9	32.9	25.4	58.9	.6	EE	(D)
37	TRANSPORTATION EQUIPMENT . . . .	54	16	3.6	37.3	1.7	3.5	12.4	81.7	51.2	133.0	5.5	(NA)	(NA)
3792	TRAVEL TRAILERS AND CAMPERS. . . .	4	4	.4	2.4	.4	.7	1.7	3.5	6.2	10.2	(D)	(NA)	(NA)
38	INSTRUMENTS AND RELATED PRODUCTS	33	3	.3	2.2	.2	.4	1.3	4.4	3.0	7.1	.1	(NA)	(NA)
39	MISC. MANUFACTURING INDUSTRIES .	67	10	1.4	10.7	1.2	2.3	8.1	18.4	19.4	37.1	1.2	.8	6.8
399	MISCELLANEOUS MANUFACTURES . . . .	34	6	.5	5.0	.4	.8	3.3	8.4	3.6	12.0	.9	BB	(D)
3993	SIGNS AND ADVERTISING DISPLAYS . . .	10	4	.4	4.2	.3	.6	2.7	6.7	2.0	8.7	(D)	.3	4.6
--	ADMINISTRATIVE AND AUXILIARY . . .	43	27	3.1	36.6	-	-	-	-	-	-	-	.6	-

Note: The following symbols indicate employment size range for 1967:

AA less than 250 employees      EE 1,000 to 2,499 employees  
BB 250 to 499 employees      FF 2,500 employees and over  
CC 500 to 999 employees

- Represents zero. (NA) Not available. (D) Withheld to avoid disclosing figures for individual companies.

<sup>1</sup>The total cost of materials and value of shipments for industry groups shown may include extensive duplication arising from shipments between establishments in the same industry classification. (For a more complete explanation, see appendix.)<sup>2</sup>Includes figures for industry groups which have been withheld from publication in order to (a) avoid disclosing figures for individual companies or (b) permit further checking of figures for smaller industry groups. Additional detail will appear in the final report for this State.

## Appendix A. SCOPE AND COVERAGE

This report is one of a series presenting preliminary information, by State, from the 1972 Census of Manufactures. The data will be superseded in a final report which, in turn, will be included in *Volume III, Area Statistics, 1972 Census of Manufactures*. The final report will include a comprehensive discussion of the concepts and definitions used in the census.

The census of manufactures covers each manufacturing establishment in the United States with one paid employee or more; manufacturing establishments with no employees are excluded. Firms which operated more than one establishment were required to file a separate report for each location. Companies which engaged in distinctly different lines of activity at one location were asked to submit separate reports if the company records permitted such a separation and the activities were of significant size.

This report includes figures for administrative offices, warehouses, garages, or other auxiliary units which service manufacturing establishments.

In the 1972 census, the approximately 120,000 manufacturing establishments with fewer than 10 employees were excused from filing reports. Under special arrangements which safeguarded the confidentiality of both tax and census records, data on payrolls, sales, and industry classification from the administrative records of the Social Security Administration and the Internal Revenue Service were made available to the Census Bureau for use in the 1972 Economic Censuses (retail and wholesale trade, service industries, construction industries, manufactures, and mineral industries). Estimates for data other than payrolls and sales for these small establishments were constructed from industry averages. The effect on industry aggregates is slight in most industries. For manufacturing as a whole, these small establishments account for less than 3 percent of the payrolls and value added.

Establishments are classified by industry in accordance with industry definitions described in the 1972 edition of the Standard Industrial Classification (SIC) Manual. For 1972, the SIC was significantly revised and the comparability with prior year's data for some industries was significantly affected. The comparability at the 2- and 3-digit SIC levels was less affected. The final volumes of the 1972 Census of Manufactures will contain a table relating aggregates based on the 1972 SIC with aggregates derived from classifying establishments according to the 1967 SIC definitions.

As in earlier censuses, a number of small establishments may have been misclassified as to industry. However, such possible misclassifications have significant effect on *none* of the statistics except the number of establishments. As indicated above, report forms were not mailed to very small establishments (fewer than 10 employees). The industry classifications for these establishments were assigned on the basis of brief descriptions of the general activity of the establishment. Where the description is incomplete or there are relatively fine lines of demarcation among industries or between manufacturing and nonmanufacturing activity, the code assigned to an establishment could differ from that which would have been assigned on the basis of more complete product information. Therefore, the total establishment count for individual industries should be viewed as an approximation rather than a precise measurement. The counts for establishments with 20 employees or more are more reliable than the total number of establishments.

More detailed figures for this State will appear in the final census reports. Final reports will also include a comprehensive discussion of such concepts as "industry" and "establishment," as well as the various statistical items such as "employment," "value of shipments," and "value added." Similar preliminary and final reports will be issued for other States during the coming months. A series of preliminary summary reports showing U.S. totals for each manufacturing industry and for each State are being issued. Final industry reports and final area reports will be published during 1974.

Order forms describing the individual reports and listing their prices may be obtained from any U.S. Department of Commerce district office or from the Publications Distribution Section, Social and Economic Statistics Administration, Washington, D.C. 20233.

The 1972 Census of Manufactures is the 29th census of manufacturing establishments in the United States. For 1972, it was conducted jointly with the censuses of mineral industries, construction industries, retail trade, wholesale trade, and selected services under authority of Title 13 of the United States Code. Title 13 specifies that a census of manufactures be conducted every 5 years and, as amended, to cover years ending in "2" and "7". Title 13 also authorizes an annual sample survey of manufacturing establishments in interim years.



## Appendix B. EXPLANATION OF TERMS

*(For a more complete discussion of these terms and the method of compiling the Census of Manufactures, see the "Introduction" to the 1967 Census of Manufactures, Volume III).*

**All Employees**—All full-time and part-time employees on the payrolls of operating manufacturing establishments for any part of the pay period ending nearest the 12th of the months specified on the report form. Included are all persons on paid sick leave, paid holidays, and paid vacations during these pay periods. Officers of corporations are included as employees; proprietors and partners of unincorporated firms are excluded. The "all employee" number is the average number of production workers for the midmonth payroll period of March, May, August, and November plus the number of nonproduction employees in mid-March.

**Number of Production Workers**—Workers (up through the working foreman level) engaged in fabricating, processing, assembling, inspecting, receiving, packing, warehousing, shipping (but not delivering), and maintenance, repair, janitorial, and watchman services, product development, auxiliary production for plant's own use (e.g., powerplant), recordkeeping, and other closely associated services. Proprietors and partners are excluded.

**Payroll**—This item includes all forms of compensation such as salaries, wages, commissions, dismissal pay, bonuses, vacation and sick leave pay, and compensation in kind, prior to such deductions as employees' Social Security contributions, withholding taxes, group insurance, union dues, and savings bonds. The total includes salaries of officers of these establishments, if a corporation; it excludes payments to the proprietor or partners, if an unincorporated concern. Respondents were told that in reporting they could follow the definition of payrolls used for calculating the Federal withholding tax.

**Man-Hours of Production Workers**—This total relates to production-worker man-hours worked or paid for at the plant including actual overtime hours (not straight-time equivalent hours). It excludes hours paid for vacation, holidays, or sick leave when the employee was not at the plant.

**Cost of Materials**—The term "Cost of Materials" refers to charges actually paid or payable for items consumed or put into production during the year, including freight and other direct charges incurred by the establishment in acquiring these materials. It includes the cost of materials or fuel consumed regardless of

whether these items were purchased by the establishment from other companies, transferred to it from other establishments of the same company, or withdrawn from inventory during the year. The establishment was requested to value materials transferred from other parts of the company at its approximate market value, not at cost of production. The important components of this cost item are (a) all raw materials, semifinished goods, parts, components, containers, scrap, and supplies put into production or used as operating supplies and for repair and maintenance during the year; (b) electric energy purchased; (c) fuels consumed for heat, power, or the generation of electricity; (d) work done by others on materials or parts furnished by manufacturing establishments (contract work); and (e) products bought and resold in the same condition.

**Value of Shipments**—The value of shipments is the received or receivable net selling value, f.o.b. plant (exclusive of freight and taxes), of all products shipped, both primary and secondary, as well as all miscellaneous receipts such as receipts for contract work performed for others, installation and repair, sales of scrap, and sale of products bought and resold without further processing. Included are all items made by the establishment or for it under contract from materials owned by it whether sold, transferred to other plants of the same company, or shipped on consignment. The net selling value of products made in one plant on a contract basis from materials owned by another was reported by the plant providing the materials.

In the case of multiunit companies, the manufacturer was requested to report the value of products transferred to other establishments of the same company at full economic value; i.e., to include not only the direct costs of production but also a reasonable proportion of "all other costs" (including company overhead) and profit.

**Duplication in Cost of Materials and Value of Products**—The aggregate cost of materials and value-of-shipments figures for industry groups and for all manufacturing industries may include large amounts of duplication since the products of some industries are used as materials by others. With some important exceptions, such as motor vehicles and parts, this duplication is not significant within individual industries but arises from the addition of the totals of related industries in successive stages of the production of a finished manufactured product. Examples are the addition of flour mills to bakeries in the food group and the addition of pulp mills to paper mills in the paper and allied products group of industries. Esti-



mates of this duplication indicate that the value of manufactured products exclusive of such duplication—the value of finished manufactures—approximates two-thirds of the total value of products.

Prior to 1962, the Bureau of the Census did not publish figures for cost of materials or value of shipments if they contained significant duplication. Effective with the 1962 annual survey these figures were shown at all industry levels for the United States to meet the requests for their use in studies in which the presence of an indeterminate amount of duplication is not a limiting factor. However, they are appropriately footnoted. Effective with the 1964 annual survey, these industry group totals are also shown at the State, standard metropolitan statistical area, and large-county level.

Even where there is no significant amount of duplication, value-of-shipments figures are deficient as measures of the relative economic importance of individual manufacturing industries or geographic areas because of the wide variation in ratio of materials, labor, and other processing costs to value of shipments among industries.

**Value Added by Manufacture**—This measure of manufacturing activity is derived by subtracting the cost of materials, supplies, containers, fuel, purchased electricity, and cost of resales contract work from the value of shipments for products manufactured plus resales and receipts for services rendered. The result of this calculation is adjusted by the net change in finished goods and work-in-process inventories between the beginning and end of the year. (In the few industries that report value of production rather than value of shipments, only changes in work-in-process inventories are used to adjust value added. In the shipbuilding and repairing industry, no inventory adjustment is made.)

“Value added” avoids the duplication in the value of shipments figure which results from the use of products of some establishments as materials by others. Value added is considered to be the best value measure available for comparing the relative economic importance of manufacturing among industries and geographic areas.

**Expenditures for Plant and Equipment**—Manufacturing establishments in operation and establishments under construction but not yet in operation, were asked to report their expenditures for (a) permanent additions and major alterations to the manufacturing establishment, and (b) new machinery and equipment used for replacement purposes and additions to plant capacity if they are of the type for which depreciation accounts are ordinarily maintained.

These totals exclude expenditures for new facilities and equipment leased from nonmanufacturing concerns; new facilities owned by the Federal Government but operated under contract by private companies; and plant and equipment furnished to the manufacturer by communities and nonprofit organizations. Expenditures for used plant and equipment (although reported in the census), expenditures for land, and cost of maintenance and repairs charged as current operating expense are also omitted from the figures for new capital expenditures.

**Central Administrative Offices and Auxiliary Units**—In the 1972 census as in previous years, respondents were asked to file separate reports for central administrative offices or auxiliary units which were (1) at different locations from the establishments served or, (2) at the same location as one of these establishments but were not operated as an integral part thereof and served two or more establishments. The functions of employees in central administrative offices include general company policy determination, planning and management (that is, company purchasing, accounting, general engineering, direction of company personnel matters, and legal and patent matters). Auxiliaries are storage facilities, garages, repair shops, purchasing offices, sales promotion offices, and research laboratories serving the plants or central management of the company.

**Standard Metropolitan Statistical Areas**—Standard metropolitan statistical areas (SMSA) are integrated economic and social units with a large volume of daily travel and communication between the central city and outlying parts of the area.<sup>1</sup> Each area (except in New England) consists of one whole county or more. An area may contain not only highly industrialized counties but also adjoining counties which, though primarily residential in character, contribute significantly to the industrial counties' labor force and are socially and economically integrated with the central city. These areas are defined by the Federal Committee on Standard Metropolitan Statistical Areas of the Office of Management and Budget for general-purpose use throughout the Federal Government in presenting economic and social data. In the New England States, similar intergration criteria are applied in defining

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<sup>1</sup> Each standard metropolitan statistical area must include either (1) a city with 50,000 or more inhabitants, or (2) a city having a population of at least 25,000 which (a) with the addition of the population of contiguous places has a population density of at least 1,000 persons per square mile; (b) constitutes, for general economic and social purposes, a single community with a combined population of at least 50,000; and (c) includes a total population of at least 75,000 in the county or counties in which the city and contiguous places are located.



SMSA's on a city and town basis because towns rather than counties are regarded as the significant unit in this region of the country.

The requirement that each SMSA consist of county units (except in New England) sometimes results in the inclusion in an area of considerable amount of territory which would not ordinarily be considered "metropolitan," much less "industrial." It is recognized that metropolitan areas could be more accurately defined in terms of smaller area segments such as minor civil

divisions, but the usefulness of areas so defined would be limited by the fact that many types of economic and social data are available only on a county basis.

Each SMSA is designated by the name of the principal city of the area. In addition to the name of the principal city, the area title may include one or two additional city names.

The data for SMSA's which changed definition since the 1967 census have not been retabulated on the new basis for years prior to 1972.

**U.S. DEPARTMENT OF COMMERCE**  
**Social and Economic Statistics Administration**  
BUREAU OF THE CENSUS  
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# 1972 CENSUS OF MANUFACTURES

AREA SERIES

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U. S. DEPARTMENT OF COMMERCE • Social and Economic Statistics Administration • BUREAU OF THE CENSUS

## Vermont

Value added by manufacturing in 1972 in the State of Vermont amounted to \$579 million, a 3-percent increase from 1971 and a 12-percent increase from 1967.

This report presents preliminary results from the 1972 Census of Manufactures for the State and its counties.

Data are provided for industry groups within the State. Historical data, back to 1958, are included for the State as a whole,

and 1967 figures on employment and value added are provided for the smaller areas.

The figures in this report have been subjected to only preliminary review and must be regarded as approximations of the final census figures. No adjustments have been made in the value figures for changes in price level.

For an explanation of the terms used in the tables, see the appendix at the end of this report.

TABLE 1. General Statistics for the State: 1972 and Earlier Years

(See appendix, Explanation of Terms)

Year	Establishments		All employees <sup>1</sup>		Production workers			Value added by manufacture	Cost of materials <sup>2</sup>	Value of shipments <sup>2</sup>	Capital expenditures, new
	Total	With 20 employees or more	Number	Payroll	Number	Man-hours	Wages				
	(number)	(number)	(1,000)	(million dollars)	(1,000)	(millions)	(million dollars)				
	VERMONT										
1972 Census .....	850	269	37.9	320.9	26.8	53.8	182.9	578.9	644.2	1,238.3	36.8
1971 ASM .....	(NA)	(NA)	37.4	296.2	25.6	51.9	161.3	562.1	540.4	1,101.9	49.7
1970 ASM .....	(NA)	(NA)	41.5	309.8	28.3	58.0	167.9	556.4	524.9	1,047.4	67.1
1969 ASM .....	(NA)	(NA)	42.6	301.0	30.0	61.5	173.4	555.5	515.2	1,043.4	51.2
1968 ASM .....	(NA)	(NA)	41.8	272.1	29.9	62.2	162.6	531.0	502.8	1,045.3	39.7
1967 Census .....	925	281	42.5	259.1	31.3	64.6	162.4	515.0	622.0	1,126.9	35.1
1966 ASM .....	(NA)	(NA)	42.3	246.4	31.9	66.8	159.5	514.2	640.8	1,129.7	34.1
1965 ASM .....	(NA)	(NA)	38.8	207.6	29.9	61.1	138.1	410.4	549.0	898.9	36.1
1964 ASM .....	(NA)	(NA)	33.7	176.5	25.8	53.4	119.4	337.2	374.6	710.7	20.7
1963 Census .....	977	267	33.7	167.9	25.7	52.4	113.4	309.3	(NA)	(NA)	15.7
1962 ASM .....	(NA)	(NA)	35.8	176.3	27.5	57.3	118.5	326.6	(NA)	(NA)	19.8
1961 ASM .....	(NA)	(NA)	34.8	158.9	26.8	54.8	107.4	286.2	(NA)	(NA)	18.8
1960 ASM .....	(NA)	(NA)	36.4	161.1	28.5	58.4	110.9	282.5	(NA)	(NA)	14.0
1959 ASM .....	(NA)	(NA)	34.9	151.5	27.4	55.5	103.4	271.6	(NA)	(NA)	16.8
1958 Census .....	1,040	277	32.5	132.5	25.4	50.3	92.1	235.9	(NA)	(NA)	11.6

Note: "ASM" data are based on a representative sample of manufacturing establishments canvassed in the Annual Survey of Manufactures. These estimates may differ from the results of a complete canvass of all manufacturing establishments. The standard errors associated with these estimates are published in the annual survey of manufactures volumes for this period. For comparative purposes the 1972 ASM estimate for the State of Vermont was 38 thousand employees and \$653 million value added with corresponding standard error of estimate of 5 and 3.

(NA) Not available.

<sup>1</sup>Includes employment and payroll at central administrative offices and auxiliary units. (For a definition of these units, see appendix.)

<sup>2</sup>The total cost of materials and value of shipments may include extensive duplication arising from shipments between establishments in the same industry classification. (For a more complete explanation, see appendix.)

TABLE 2. General Statistics for the State, Standard Metropolitan Statistical Areas, and Counties: 1972 and 1967

(See appendix, Explanation of Terms)

State, standard metropolitan statistical areas, and counties <sup>1</sup>	1972										1967		
	Establishments		All employees <sup>2</sup>		Production workers			Value added by manu- facture	Cost of materials <sup>3</sup>	Value of shipments <sup>3</sup>	Capital expenditures, MIM	All employees	Value added by manu- facture
	Total	With 20 employees or more	Number	Payroll	Number	Man-hours	Wages						
	(number)	(number)	(1,000)	(million dollars)	(1,000)	(million)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(1,000)	(million dollars)
VERMONT, TOTAL . . . . .	850	269	37.9	320.9	26.8	53.8	182.9	578.9	644.2	1 238.3	36.8	42.5	515.0
STANDARD METROPOLITAN STATISTICAL AREAS (None in this State)													
COUNTIES													
ADDISON . . . . .	38	10	1.5	13.1	1.2	2.6	8.7	25.3	24.8	50.9	1.7	2.1	20.5
BENNINGTON . . . . .	72	32	4.3	29.2	3.4	6.6	20.5	62.2	56.7	116.4	6.9	4.4	42.5
CALEDONIA . . . . .	55	12	1.0	7.5	.8	1.5	5.2	17.3	24.5	41.0	1.1	1.6	20.8
CHITTENDEN . . . . .	101	35	8.5	99.1	3.3	6.6	24.8	148.0	210.3	384.4	8.9	9.1	143.7
FRANKLIN . . . . .	45	13	2.1	16.3	1.7	3.4	11.8	31.4	76.0	107.2	1.8	1.9	29.9
LAMOILLE . . . . .	34	7	.4	2.3	.3	.6	1.8	3.8	3.4	7.4	.3	.4	2.9
ORANGE . . . . .	34	12	.7	4.4	.6	1.3	3.5	8.5	6.7	14.9	1.8	.7	5.3
ORLEANS . . . . .	32	14	1.6	10.6	1.3	2.8	8.5	20.9	51.7	71.2	1.0	1.6	14.2
RUTLAND . . . . .	105	35	4.4	32.4	3.5	7.1	23.1	76.0	43.4	118.0	4.6	5.2	60.6
WASHINGTON . . . . .	117	36	2.7	20.1	2.2	4.3	15.2	33.3	34.0	67.2	1.4	3.1	31.0
WINDHAM . . . . .	103	31	3.5	25.8	3.0	5.8	19.8	50.3	34.9	84.2	3.1	3.6	41.8
WINDSOR . . . . .	99	27	5.3	45.9	3.8	7.5	27.9	75.1	58.5	129.8	3.1	7.6	93.5

<sup>1</sup>Some counties were withheld from publication in order to (a) avoid disclosing figures for individual companies or (b) permit further checking of the figures for smaller counties. Additional detail will appear in the final report for this State.

<sup>2</sup>Includes employment and payroll at central administrative offices and auxiliary units. (For a definition of these units, see appendix.)

<sup>3</sup>The total cost of materials and value of shipments may include extensive duplication arising from shipments between establishments in the same industry classification. (For a more complete explanation, see appendix.)



TABLE 3. General Statistics for the State, by Industry Groups and Industries: 1972 and 1967

(See appendix, Explanation of Terms)

Code	Industry	1972										1967		
		Establishments		All employees		Production workers			Value added by manufacture	Cost of materials <sup>1</sup>	Value of shipments <sup>1</sup>	Capital expenditures, new	All employees	Value added by manufacture
		Total	With 20 employees or more	Number	Payroll	Number	Man-hours	Wages						
		(number)	(number)	(1,000)	(million dollars)	(1,000)	(million)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(1,000)	(million dollars)
	ALL INDUSTRIES, TOTAL <sup>2</sup> . . . . .	850	269	37.9	320.9	26.8	53.8	182.9	578.9	644.2	1 238.3	36.8	42.5	515.0
20	FOOD AND KINDRED PRODUCTS. . . . .	46	32	2.0	15.6	1.3	2.7	8.6	40.7	149.4	189.9	3.0	2.2	39.9
202	DAIRY PRODUCTS . . . . .	37	16	.8	6.4	.6	1.2	3.8	16.2	70.4	86.6	.9	1.0	15.0
2026	FLUID MILK . . . . .	26	11	.7	5.2	.4	.9	2.7	8.9	50.6	59.5	.7	.8	12.9
204	GRAIN MILL PRODUCTS. . . . .	11	4	.4	3.6	.3	.6	2.1	9.8	52.0	61.7	1.0	.5	16.8
2049	PREPARED FEEDS, NEC. . . . .	11	4	.4	3.6	.3	.6	2.1	9.8	52.0	61.7	1.0	(NA)	(NA)
22	TEXTILE MILL PRODUCTS. . . . .	14	9	.6	3.4	.5	1.0	2.7	5.9	2.6	8.6	.7	.5	3.3
23	APPAREL, OTHER TEXTILE PRODUCTS. . . . .	24	14	1.2	5.1	1.0	1.8	4.3	7.9	2.6	10.3	.2	1.1	5.5
233	WOMEN'S, AND MISSES' OUTERWEAR . . . . .	9	7	.6	2.6	.6	.9	2.3	3.5	.6	4.1	(Z)	.3	1.3
24	LUMBER AND WOOD PRODUCTS . . . . .	214	34	2.5	15.9	2.2	4.6	12.6	28.5	41.6	70.1	3.9	(NA)	(NA)
242	SAWMILLS AND PLANING MILLS . . . . .	70	14	.8	5.3	.7	1.5	4.4	9.6	11.8	21.5	1.3	EE	(D)
2421	SAWMILLS AND PLANING MILLS, GENERAL. . . . .	59	9	.5	3.9	.5	1.0	3.2	7.8	8.9	16.8	.9	.8	5.5
25	FURNITURE AND FIXTURES . . . . .	24	10	2.2	14.8	1.9	4.3	12.3	25.6	39.9	62.6	2.3	2.0	16.5
26	PAPER AND ALLIED PRODUCTS. . . . .	21	16	2.1	17.5	1.7	3.7	12.9	52.0	48.0	100.3	3.5	FF	(D)
2621	PAPERMILLS, EXCEPT BUILDING PAPER. . . . .	5	4	.4	3.4	.3	.8	2.7	11.3	12.0	23.3	.6	.5	7.9
264	MISC. CONVERTED PAPER PRODUCTS . . . . .	10	6	.8	5.3	.7	1.4	4.2	25.7	15.4	40.7	.8	EE	(D)
27	PRINTING AND PUBLISHING. . . . .	118	33	4.5	36.2	3.4	6.7	25.9	69.3	27.5	96.4	3.0	3.3	34.3
2711	NEWSPAPERS . . . . .	22	11	.8	5.2	.4	.8	2.6	11.4	2.4	13.8	.5	.6	6.6
273	BOOKS. . . . .	6	4	2.0	16.3	1.7	3.4	13.6	25.3	9.1	34.3	.5	EE	(D)
275	COMMERCIAL PRINTING. . . . .	69	8	.7	6.3	.5	.9	3.7	11.3	5.9	17.1	1.0	(NA)	(NA)
2752	COMMERCIAL PRINTING, LITHOGRAPHIC. . . . .	21	7	.6	5.0	.4	.7	2.8	9.0	4.5	13.5	.8	(NA)	(NA)
30	RUBBER AND MISC. PLASTICS PROD. . . . .	17	9	1.7	11.7	1.4	2.9	9.0	21.9	15.8	37.5	1.4	EE	(D)
31	LEATHER AND LEATHER PRODUCTS . . . . .	7	5	.6	3.1	.5	.9	2.4	3.6	8.0	11.6	(D)	.6	4.1
32	STONE, CLAY, AND GLASS PRODUCTS . . . . .	119	33	2.6	20.4	2.1	4.0	14.9	36.2	28.1	63.7	2.5	2.8	27.8
327	CONCRETE, GYPSUM, PLASTER PRODUCTS . . . . .	22	5	.5	3.7	.3	.5	1.6	7.3	7.4	14.6	1.4	.3	5.1
3273	READY-MIXED CONCRETE . . . . .	6	3	.3	2.7	.2	.3	1.0	5.2	5.2	10.4	1.1	.2	4.4
3281	CUT STONE AND STONE PRODUCTS . . . . .	90	26	2.0	15.8	1.7	3.3	12.7	27.7	20.1	47.3	1.1	EE	(D)
34	FABRICATED METAL PRODUCTS. . . . .	32	6	2.4	25.4	1.0	2.2	8.7	42.4	19.1	60.9	1.0	.6	6.1
35	MACHINERY, EXCEPT ELECTRICAL. . . . .	66	25	5.2	47.0	3.7	7.5	30.0	92.3	50.8	137.7	6.0	7.6	101.8
354	METALWORKING MACHINERY . . . . .	16	11	3.8	35.1	2.7	5.4	22.2	63.2	37.5	95.8	5.0	5.4	72.3
3541	MACHINE TOOLS, METAL CUTTING TYPES . . . . .	4	4	2.5	24.9	1.6	3.2	14.1	39.3	22.5	57.9	(D)	FF	(D)
3545	MACHINE TOOL ACCESSORIES . . . . .	6	5	1.2	9.5	1.0	2.0	7.5	22.8	14.6	36.4	(D)	1.0	11.9
355	SPECIAL INDUSTRY MACHINERY . . . . .	15	4	.3	2.1	.2	.4	1.3	3.4	2.2	5.5	.2	.2	1.7
36	ELECTRIC, ELECTRONIC EQUIPMENT . . . . .	15	8	5.6	68.4	2.3	4.5	16.0	84.1	171.8	282.4	6.8	FF	(D)
38	INSTRUMENTS AND RELATED PRODUCTS . . . . .	14	6	1.2	10.1	.9	1.9	6.0	18.7	6.8	26.3	.5	EE	(D)
39	MISC. MANUFACTURING INDUSTRIES . . . . .	37	13	.9	4.7	.7	1.2	3.0	11.1	6.4	17.3	.7	.6	5.1
394	TOYS AND SPORTING GOODS. . . . .	14	8	.5	2.2	.4	.6	1.3	4.9	2.5	7.2	.3	.2	1.7
3949	SPORTING AND ATHLETIC GOODS, NEC . . . . .	5	4	.3	1.4	.2	.3	.6	3.9	1.4	5.1	(Z)	(NA)	(NA)
399	MISCELLANEOUS MANUFACTURES . . . . .	13	5	.4	2.3	.3	.5	1.6	5.8	3.8	9.6	.4	.3	3.1

Note: The following symbols indicate employment size range for 1967:

AA less than 250 employees

EE 1,000 to 2,499 employees

BB 250 to 499 employees

FF 2,500 employees and over

CC 500 to 999 employees

(NA) Not available. (D) Withheld to avoid disclosing figures for individual companies. (Z) Less than half of the unit of measurement shown.

<sup>1</sup>The total cost of materials and value of shipments for industry groups shown may include extensive duplication arising from shipments between establishments in the same industry classification. (For a more complete explanation, see appendix.)<sup>2</sup>Includes figures for industry groups which have been withheld from publication in order to (a) avoid disclosing figures for individual companies or (b) permit further checking of figures for smaller industry groups. Additional detail will appear in the final report for this State.

## Appendix A. SCOPE AND COVERAGE

This report is one of a series presenting preliminary information, by State, from the 1972 Census of Manufactures. The data will be superseded in a final report which, in turn, will be included in *Volume III, Area Statistics, 1972 Census of Manufactures*. The final report will include a comprehensive discussion of the concepts and definitions used in the census.

The census of manufactures covers each manufacturing establishment in the United States with one paid employee or more; manufacturing establishments with no employees are excluded. Firms which operated more than one establishment were required to file a separate report for each location. Companies which engaged in distinctly different lines of activity at one location were asked to submit separate reports if the company records permitted such a separation and the activities were of significant size.

This report includes figures for administrative offices, warehouses, garages, or other auxiliary units which service manufacturing establishments.

In the 1972 census, the approximately 120,000 manufacturing establishments with fewer than 10 employees were excused from filing reports. Under special arrangements which safeguarded the confidentiality of both tax and census records, data on payrolls, sales, and industry classification from the administrative records of the Social Security Administration and the Internal Revenue Service were made available to the Census Bureau for use in the 1972 Economic Censuses (retail and wholesale trade, service industries, construction industries, manufactures, and mineral industries). Estimates for data other than payrolls and sales for these small establishments were constructed from industry averages. The effect on industry aggregates is slight in most industries. For manufacturing as a whole, these small establishments account for less than 3 percent of the payrolls and value added.

Establishments are classified by industry in accordance with industry definitions described in the 1972 edition of the Standard Industrial Classification (SIC) Manual. For 1972, the SIC was significantly revised and the comparability with prior year's data for some industries was significantly affected. The comparability at the 2- and 3-digit SIC levels was less affected. The final volumes of the 1972 Census of Manufactures will contain a table relating aggregates based on the 1972 SIC with aggregates derived from classifying establishments according to the 1967 SIC definitions.

As in earlier censuses, a number of small establishments may have been misclassified as to industry. However, such possible misclassifications have significant effect on *none* of the statistics except the number of establishments. As indicated above, report forms were not mailed to very small establishments (fewer than 10 employees). The industry classifications for these establishments were assigned on the basis of brief descriptions of the general activity of the establishment. Where the description is incomplete or there are relatively fine lines of demarcation among industries or between manufacturing and nonmanufacturing activity, the code assigned to an establishment could differ from that which would have been assigned on the basis of more complete product information. Therefore, the total establishment count for individual industries should be viewed as an approximation rather than a precise measurement. The counts for establishments with 20 employees or more are more reliable than the total number of establishments.

More detailed figures for this State will appear in the final census reports. Final reports will also include a comprehensive discussion of such concepts as "industry" and "establishment," as well as the various statistical items such as "employment," "value of shipments," and "value added." Similar preliminary and final reports will be issued for other States during the coming months. A series of preliminary summary reports showing U.S. totals for each manufacturing industry and for each State are being issued. Final industry reports and final area reports will be published during 1974.

Order forms describing the individual reports and listing their prices may be obtained from any U.S. Department of Commerce district office or from the Publications Distribution Section, Social and Economic Statistics Administration, Washington, D.C. 20233.

The 1972 Census of Manufactures is the 29th census of manufacturing establishments in the United States. For 1972, it was conducted jointly with the censuses of mineral industries, construction industries, retail trade, wholesale trade, and selected services under authority of Title 13 of the United States Code. Title 13 specifies that a census of manufactures be conducted every 5 years and, as amended, to cover years ending in "2" and "7". Title 13 also authorizes an annual sample survey of manufacturing establishments in interim years.



## Appendix B. EXPLANATION OF TERMS

*(For a more complete discussion of these terms and the method of compiling the Census of Manufactures, see the "Introduction" to the 1967 Census of Manufactures, Volume III).*

**All Employees**—All full-time and part-time employees on the payrolls of operating manufacturing establishments for any part of the pay period ending nearest the 12th of the months specified on the report form. Included are all persons on paid sick leave, paid holidays, and paid vacations during these pay periods. Officers of corporations are included as employees; proprietors and partners of unincorporated firms are excluded. The "all employee" number is the average number of production workers for the midmonth payroll period of March, May, August, and November plus the number of nonproduction employees in mid-March.

**Number of Production Workers**—Workers (up through the working foreman level) engaged in fabricating, processing, assembling, inspecting, receiving, packing, warehousing, shipping (but not delivering), and maintenance, repair, janitorial, and watchman services, product development, auxiliary production for plant's own use (e.g., powerplant), recordkeeping, and other closely associated services. Proprietors and partners are excluded.

**Payroll**—This item includes all forms of compensation such as salaries, wages, commissions, dismissal pay, bonuses, vacation and sick leave pay, and compensation in kind, prior to such deductions as employees' Social Security contributions, withholding taxes, group insurance, union dues, and savings bonds. The total includes salaries of officers of these establishments, if a corporation; it excludes payments to the proprietor or partners, if an unincorporated concern. Respondents were told that in reporting they could follow the definition of payrolls used for calculating the Federal withholding tax.

**Man-Hours of Production Workers**—This total relates to production-worker man-hours worked or paid for at the plant including actual overtime hours (not straight-time equivalent hours). It excludes hours paid for vacation, holidays, or sick leave when the employee was not at the plant.

**Cost of Materials**—The term "Cost of Materials" refers to charges actually paid or payable for items consumed or put into production during the year, including freight and other direct charges incurred by the establishment in acquiring these materials. It includes the cost of materials or fuel consumed regardless of

whether these items were purchased by the establishment from other companies, transferred to it from other establishments of the same company, or withdrawn from inventory during the year. The establishment was requested to value materials transferred from other parts of the company at its approximate market value, not at cost of production. The important components of this cost item are (a) all raw materials, semifinished goods, parts, components, containers, scrap, and supplies put into production or used as operating supplies and for repair and maintenance during the year; (b) electric energy purchased; (c) fuels consumed for heat, power, or the generation of electricity; (d) work done by others on materials or parts furnished by manufacturing establishments (contract work); and (e) products bought and resold in the same condition.

**Value of Shipments**—The value of shipments is the received or receivable net selling value, f.o.b. plant (exclusive of freight and taxes), of all products shipped, both primary and secondary, as well as all miscellaneous receipts such as receipts for contract work performed for others, installation and repair, sales of scrap, and sale of products bought and resold without further processing. Included are all items made by the establishment or for it under contract from materials owned by it whether sold, transferred to other plants of the same company, or shipped on consignment. The net selling value of products made in one plant on a contract basis from materials owned by another was reported by the plant providing the materials.

In the case of multiunit companies, the manufacturer was requested to report the value of products transferred to other establishments of the same company at full economic value; i.e., to include not only the direct costs of production but also a reasonable proportion of "all other costs" (including company overhead) and profit.

**Duplication in Cost of Materials and Value of Products**—The aggregate cost of materials and value-of-shipments figures for industry groups and for all manufacturing industries may include large amounts of duplication since the products of some industries are used as materials by others. With some important exceptions, such as motor vehicles and parts, this duplication is not significant within individual industries but arises from the addition of the totals of related industries in successive stages of the production of a finished manufactured product. Examples are the addition of flour mills to bakeries in the food group and the addition of pulp mills to paper mills in the paper and allied products group of industries. Esti-



mates of this duplication indicate that the value of manufactured products exclusive of such duplication—the value of finished manufactures—approximates two-thirds of the total value of products.

Prior to 1962, the Bureau of the Census did not publish figures for cost of materials or value of shipments if they contained significant duplication. Effective with the 1962 annual survey these figures were shown at all industry levels for the United States to meet the requests for their use in studies in which the presence of an indeterminate amount of duplication is not a limiting factor. However, they are appropriately footnoted. Effective with the 1964 annual survey, these industry group totals are also shown at the State, standard metropolitan statistical area, and large-county level.

Even where there is no significant amount of duplication, value-of-shipments figures are deficient as measures of the relative economic importance of individual manufacturing industries or geographic areas because of the wide variation in ratio of materials, labor, and other processing costs to value of shipments among industries.

**Value Added by Manufacture**—This measure of manufacturing activity is derived by subtracting the cost of materials, supplies, containers, fuel, purchased electricity, and cost of resale contract work from the value of shipments for products manufactured plus resale and receipts for services rendered. The result of this calculation is adjusted by the net change in finished goods and work-in-process inventories between the beginning and end of the year. (In the few industries that report value of production rather than value of shipments, only changes in work-in-process inventories are used to adjust value added. In the shipbuilding and repairing industry, no inventory adjustment is made.)

“Value added” avoids the duplication in the value of shipments figure which results from the use of products of some establishments as materials by others. Value added is considered to be the best value measure available for comparing the relative economic importance of manufacturing among industries and geographic areas.

**Expenditures for Plant and Equipment**—Manufacturing establishments in operation and establishments under construction but not yet in operation, were asked to report their expenditures for (a) permanent additions and major alterations to the manufacturing establishment, and (b) new machinery and equipment used for replacement purposes and additions to plant capacity if they are of the type for which depreciation accounts are ordinarily maintained.

These totals exclude expenditures for new facilities and equipment leased from nonmanufacturing concerns; new facilities owned by the Federal Government but operated under contract by private companies; and plant and equipment furnished to the manufacturer by communities and nonprofit organizations. Expenditures for used plant and equipment (although reported in the census), expenditures for land, and cost of maintenance and repairs charged as current operating expense are also omitted from the figures for new capital expenditures.

**Central Administrative Offices and Auxiliary Units**—In the 1972 census as in previous years, respondents were asked to file separate reports for central administrative offices or auxiliary units which were (1) at different locations from the establishments served or, (2) at the same location as one of these establishments but were not operated as an integral part thereof and served two or more establishments. The functions of employees in central administrative offices include general company policy determination, planning and management (that is, company purchasing, accounting, general engineering, direction of company personnel matters, and legal and patent matters). Auxiliaries are storage facilities, garages, repair shops, purchasing offices, sales promotion offices, and research laboratories serving the plants or central management of the company.

**Standard Metropolitan Statistical Areas**—Standard metropolitan statistical areas (SMSA) are integrated economic and social units with a large volume of daily travel and communication between the central city and outlying parts of the area.<sup>1</sup> Each area (except in New England) consists of one whole county or more. An area may contain not only highly industrialized counties but also adjoining counties which, though primarily residential in character, contribute significantly to the industrial counties' labor force and are socially and economically integrated with the central city. These areas are defined by the Federal Committee on Standard Metropolitan Statistical Areas of the Office of Management and Budget for general-purpose use throughout the Federal Government in presenting economic and social data. In the New England States, similar intergration criteria are applied in defining

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<sup>1</sup> Each standard metropolitan statistical area must include either (1) a city with 50,000 or more inhabitants, or (2) a city having a population of at least 25,000 which (a) with the addition of the population of contiguous places has a population density of at least 1,000 persons per square mile; (b) constitutes, for general economic and social purposes, a single community with a combined population of at least 50,000; and (c) includes a total population of at least 75,000 in the county or counties in which the city and contiguous places are located.



SMSA's on a city and town basis because towns rather than counties are regarded as the significant unit in this region of the country.

The requirement that each SMSA consist of county units (except in New England) sometimes results in the inclusion in an area of considerable amount of territory which would not ordinarily be considered "metropolitan," much less "industrial." It is recognized that metropolitan areas could be more accurately defined in terms of smaller area segments such as minor civil

divisions, but the usefulness of areas so defined would be limited by the fact that many types of economic and social data are available only on a county basis.

Each SMSA is designated by the name of the principal city of the area. In addition to the name of the principal city, the area title may include one or two additional city names.

The data for SMSA's which changed definition since the 1967 census have not been retabulated on the new basis for years prior to 1972.

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**Social and Economic Statistics Administration**  
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# PRELIMINARY REPORT

# 1972 CENSUS OF MANUFACTURES

## AREA SERIES

C72(P)-S47

Issued April 1974

U. S. DEPARTMENT OF COMMERCE • Social and Economic Statistics Administration • BUREAU OF THE CENSUS

## Virginia

Value added by manufacturing in 1972 in the State of Virginia amounted to \$6,122 million, an 18-percent increase from 1971 and a 50-percent increase from 1967.

This report presents preliminary results from the 1972 Census of Manufactures for the State, its Standard Metropolitan Statistical Areas, and its counties.

Data are provided for industry groups within the State. Historical data, back to 1958, are included for the State as a whole, and

1967 figures on employment and value added are provided for the smaller areas.

The figures in this report have been subjected to only preliminary review and must be regarded as approximations of the final census figures. No adjustments have been made in the value figures for changes in price level.

For an explanation of the terms used in the tables, see the appendix at the end of this report.

TABLE 1. General Statistics for the State: 1972 and Earlier Years

(See appendix, Explanation of Terms)

Year	Establishments		All employees <sup>1</sup>		Production workers			Value added by manufacture	Cost of materials <sup>2</sup>	Value of shipments <sup>2</sup>	Capital expenditures, new
	Total	With 20 employees or more	Number	Payroll	Number	Man-hours	Wages				
	(number)	(number)	(1,000)	(million dollars)	(1,000)	(millions)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(million dollars)
VIRGINIA											
1972 Census .....	4,809	1,756	376.6	2,846.7	292.3	582.5	1,901.0	6,121.8	6,728.9	12,780.9	582.6
1971 ASM .....	(NA)	(NA)	350.6	2,448.1	269.5	528.3	1,610.1	5,172.8	5,737.5	10,949.6	435.3
1970 ASM .....	(NA)	(NA)	354.1	2,343.0	273.0	536.1	1,548.5	4,921.5	5,450.7	10,338.4	394.4
1969 ASM .....	(NA)	(NA)	360.4	2,290.8	281.2	563.6	1,547.5	4,816.2	5,263.2	10,024.4	388.9
1968 ASM .....	(NA)	(NA)	355.2	2,145.9	279.9	565.7	1,470.9	4,627.1	4,955.4	9,503.2	336.8
1967 Census .....	4,938	1,620	339.8	1,905.1	268.2	535.0	1,296.1	4,067.7	4,543.0	8,605.8	347.0
1966 ASM .....	(NA)	(NA)	335.6	1,808.5	264.1	541.7	1,224.4	3,938.4	4,498.8	8,310.0	374.8
1965 ASM .....	(NA)	(NA)	317.7	1,659.8	249.8	515.1	1,134.8	3,573.6	4,149.0	7,660.0	328.1
1964 ASM .....	(NA)	(NA)	308.9	1,554.4	241.9	498.0	1,065.9	3,305.7	3,776.1	7,043.0	275.3
1963 Census .....	4,542	1,573	302.1	1,432.0	239.6	480.2	992.1	3,046.3	(NA)	(NA)	231.8
1962 ASM .....	(NA)	(NA)	296.1	1,342.5	237.1	473.8	941.4	2,850.5	(NA)	(NA)	182.9
1961 ASM .....	(NA)	(NA)	277.0	1,191.2	221.1	433.7	824.8	2,506.5	(NA)	(NA)	178.9
1960 ASM .....	(NA)	(NA)	272.8	1,135.0	218.4	427.7	792.3	2,433.0	(NA)	(NA)	143.3
1959 ASM .....	(NA)	(NA)	265.7	1,068.4	213.9	423.6	754.7	2,381.8	(NA)	(NA)	120.0
1958 Census .....	4,472	1,381	258.1	986.5	204.4	397.6	686.8	2,122.7	(NA)	(NA)	146.5

Note: "ASM" data are based on a representative sample of manufacturing establishments canvassed in the Annual Survey of Manufactures. These estimates may differ from the results of a complete canvass of all manufacturing establishments. The standard errors associated with these estimates are published in the annual survey of manufactures volumes for this period. For comparative purposes, the 1972 ASM estimate for the State of Virginia was 365 thousand employees, and \$5,987 million in value added with corresponding standard error of estimate of 1 and 1.

(NA) Not available.

<sup>1</sup>Includes employment and payroll at central administrative offices and auxiliary units. (For a definition of these units, see appendix.)

<sup>2</sup>The total cost of materials and value of shipments may include extensive duplication arising from shipments between establishments in the same industry classification. (For a more complete explanation, see appendix.)

TABLE 2. General Statistics for the State, Standard Metropolitan Statistical Areas, and Counties: 1972 and 1967

(See appendix, Explanation of Terms)

State, standard metropolitan statistical areas, and counties <sup>1</sup>	1972											1967	
	Establishments		All employees <sup>2</sup>		Production workers			Value added by manufacture	Cost of materials <sup>3</sup>	Value of shipments <sup>3</sup>	Capital expenditures, new	All employees	Value added by manufacture
	Total	With 20 employees or more	Number	Payroll	Number	Man-hours	Wages						
	(number)	(number)	(1,000)	(million dollars)	(1,000)	(million)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(1,000)	(million dollars)
VIRGINIA, TOTAL . . . . .	4 809	1 756	376.6	2 846.7	292.3	582.5	1 901.0	6 121.8	6 728.9	12 780.9	582.6	339.8	4 067.7
STANDARD METROPOLITAN STATISTICAL AREAS <sup>4</sup>													
KINGSFORD-BRISTOL . . . . .	225	96	32.9	300.9	23.9	48.4	190.2	649.7	703.0	1 352.0	59.3	32.7	486.9
PORTION IN VIRGINIA . . . . .	102	43	6.4	45.2	4.9	9.9	30.6	107.4	178.5	282.9	8.6	5.8	60.2
PORTION IN TENNESSEE . . . . .	123	53	26.5	255.7	19.0	38.5	159.6	542.3	524.5	1 069.1	50.7	26.9	426.7
LYNCHBURG . . . . .	255	94	23.8	188.1	16.7	35.0	108.5	378.2	269.9	639.2	32.3	20.6	223.2
NEWPORT NEWS-HAMPTON . . . . .	212	90	35.5	321.5	29.5	57.1	255.7	460.3	405.6	864.5	47.1	27.0	253.7
NORFOLK-VIRGINIA BEACH-PORTSMOUTH . . . . .	385	145	23.6	181.7	17.5	35.9	116.7	443.5	673.3	1 102.7	38.4	18.9	231.6
PORTION IN VIRGINIA . . . . .	375	143	23.5	181.1	17.4	35.7	116.2	441.9	670.0	1 097.8	38.3	18.9	231.5
PORTION IN NORTH CAROLINA . . . . .	10	2	.1	.6	.1	.2	.5	1.6	3.3	4.9	.1	(2)	.1
PETERSBURG-COLONIAL HEIGHTS-HOPEWELL . . . . .	117	45	12.4	103.1	10.1	19.4	76.0	375.5	283.5	658.6	36.7	(NA)	(NA)
RICHMOND . . . . .	696	301	52.9	470.9	34.4	68.7	255.6	1 082.7	1 225.8	2 303.5	134.7	51.4	777.3
ROANOKE . . . . .	204	91	20.3	155.8	15.1	31.1	97.9	341.2	289.0	646.0	27.2	16.9	192.4
WASHINGTON, DC-MD-VA . . . . .	1 721	475	54.8	586.1	29.0	54.6	259.6	1 022.3	820.9	1 831.6	59.1	55.9	732.8
PORTION IN MARYLAND . . . . .	716	213	22.0	230.8	12.3	23.9	104.5	381.8	378.0	746.7	16.0	19.4	257.9
PORTION IN DISTRICT OF COLUMBIA . . . . .	574	137	19.6	219.3	9.5	17.0	97.5	385.9	243.8	626.6	18.7	23.1	332.8
PORTION IN VIRGINIA . . . . .	431	125	13.2	136.0	7.2	13.7	57.6	254.6	199.1	458.3	24.4	13.4	142.1
COUNTIES													
ACCOMACK . . . . .	41	12	2.4	10.7	2.3	4.1	9.9	21.0	47.4	68.4	1.7	1.0	5.8
ALBEMARLE . . . . .	24	4	3.3	24.7	2.2	4.7	12.9	56.0	59.9	115.7	2.3	5.0	76.5
AMHERST . . . . .	32	7	.4	3.2	.3	.5	1.2	2.8	4.3	7.3	.6	.5	3.6
APPOMATTOX . . . . .	29	3	.7	2.8	.6	1.1	2.5	10.7	1.6	10.8	.2	.5	2.2
ARLINGTON . . . . .	80	12	1.0	9.2	.6	1.1	4.8	15.9	10.5	26.6	(D)	1.4	10.0
AUGUSTA . . . . .	30	8	3.3	27.8	2.7	5.3	20.9	42.3	47.7	95.1	4.2	3.5	45.6
BEDFORD . . . . .	29	5	.8	5.6	.7	1.4	4.1	14.5	14.9	29.3	(D)	3.0	38.5
BLAND . . . . .	6	2	.3	1.4	.3	.6	1.3	1.8	.5	2.5	.1	(D)	(D)
BRUNSWICK . . . . .	47	12	1.4	6.4	1.3	2.4	5.2	11.2	11.6	22.7	1.0	1.2	7.0
BUCHANAN . . . . .	24	3	.3	2.2	.3	.6	1.8	6.3	14.0	20.1	.4	.2	3.2
CAMPBELL . . . . .	66	16	4.3	24.3	3.8	7.8	20.0	62.0	49.0	108.8	14.3	4.7	41.3
CAROLINE . . . . .	29	9	.7	3.5	.6	1.2	2.9	9.1	13.4	22.0	.4	.7	3.5
CARROLL . . . . .	23	7	1.1	6.0	1.0	2.0	5.1	14.7	3.7	18.2	.9	.5	6.1
CHARLOTTE . . . . .	39	6	1.0	5.1	.8	1.6	4.1	7.9	14.1	21.0	3.0	1.4	14.8
CHESTERFIELD . . . . .	82	44	11.6	99.9	8.6	16.9	66.0	268.5	302.0	575.4	25.1	10.7	155.9
CULPEPER . . . . .	26	7	1.2	7.0	.9	1.8	4.8	15.2	25.4	40.9	1.6	1.1	8.5
DINWIDDIE . . . . .	20	4	.6	2.0	.6	1.2	1.8	4.2	4.8	8.7	1.3	(D)	(D)
ESSEX . . . . .	32	8	.8	4.5	.7	1.4	3.5	13.2	17.7	29.9	.8	.9	7.7
FAIRFAX . . . . .	157	52	6.1	61.4	3.3	6.1	26.6	103.7	84.5	185.7	4.8	6.0	63.3
FAUQUET . . . . .	27	6	.4	2.4	.2	.5	1.3	5.6	4.6	9.7	.5	.2	2.4
FLOYD . . . . .	24	4	.5	2.1	.5	.8	2.0	3.1	1.3	4.4	.1	.6	2.8
FLUVANNA . . . . .	30	4	.7	4.5	.7	1.3	3.6	10.5	34.3	45.7	(D)	.2	1.0
FRANKLIN . . . . .	48	17	3.2	19.2	2.8	5.5	13.6	38.3	52.3	90.6	2.6	2.1	18.2
FREDERICK . . . . .	10	5	.8	4.9	.6	1.4	3.6	7.9	7.6	15.6	.3	2.0	23.2
GILES . . . . .	14	6	2.7	19.2	2.2	4.3	14.0	47.4	43.7	92.4	(D)	(D)	(D)
GLOUCESTER . . . . .	31	5	.4	2.6	.3	.5	1.4	3.7	5.0	8.5	.5	.3	2.9
GRAYSON . . . . .	15	6	2.1	9.1	1.9	3.5	7.7	18.1	18.3	36.5	.4	3.0	15.0
HANOVER . . . . .	45	15	1.2	7.3	1.0	2.0	5.3	12.2	16.9	28.3	1.6	.8	7.6
HENRICO . . . . .	120	44	5.3	47.1	2.7	5.4	16.8	58.5	90.4	148.5	2.5	3.5	31.3
HENRY . . . . .	51	20	12.2	97.3	10.4	22.2	72.3	213.0	172.0	387.0	11.0	12.3	190.5
LANCASTER . . . . .	28	12	.9	5.7	.8	1.2	4.0	8.0	8.8	16.9	.3	.7	2.8
LEE . . . . .	11	3	.4	1.9	.4	.7	1.5	3.1	6.1	9.1	.1	(2)	.1
LOUDOUN . . . . .	22	5	.4	3.6	.3	.7	2.5	8.1	21.9	29.7	.3	(D)	(D)
LOUISA . . . . .	40	10	1.4	5.6	1.3	2.4	5.1	9.8	4.9	14.6	(D)	.9	4.6
LUNENBURG . . . . .	26	14	1.7	8.2	1.5	3.1	6.8	14.5	24.1	37.5	.9	1.2	8.0
MADISON . . . . .	17	4	.4	1.8	.4	.7	1.5	2.5	2.0	4.5	.1	.5	2.0
MECKLENBURG . . . . .	53	19	5.1	29.8	4.4	8.9	21.6	47.6	115.2	161.9	3.3	3.7	35.1
MIDDLESEX . . . . .	26	3	.3	1.3	.2	.3	1.0	2.8	2.5	5.2	.1	.2	1.5
MONTGOMERY . . . . .	32	12	2.3	14.9	1.9	3.8	10.3	29.7	27.2	55.7	.8	9.2	70.5
NELSON . . . . .	28	4	.3	1.6	.3	.5	1.3	2.3	1.3	3.6	.1	(D)	(D)
NORTHAMPTON . . . . .	19	5	1.0	5.6	.9	1.6	4.6	11.6	12.4	24.3	.3	.8	7.3
NORTHUMBERLAND . . . . .	39	10	.7	3.9	.6	1.2	3.0	15.0	13.7	27.9	1.1	.8	4.9
NOTTOWAY . . . . .	19	7	.9	4.2	.9	1.6	3.8	9.6	8.9	18.5	.2	1.2	9.2
ORANGE . . . . .	34	15	2.3	14.6	1.8	3.7	11.6	29.1	19.8	47.3	1.8	1.9	14.5
PAGE . . . . .	16	9	1.9	10.8	1.6	3.2	8.8	39.0	54.5	92.5	.7	1.6	16.4
PITTSYLVANIA . . . . .	42	11	4.4	33.6	3.5	7.0	24.0	103.4	294.5	396.8	25.9	2.6	28.8
PRINCE EDWARD . . . . .	35	6	1.6	7.5	1.3	2.6	6.1	11.4	10.0	21.4	.4	1.2	5.4
PRINCE WILLIAM . . . . .	36	17	2.9	37.3	1.3	2.5	10.9	58.8	28.9	95.2	(D)	.5	8.0
PULASKI . . . . .	41	21	5.5	31.0	4.9	10.5	25.2	64.1	75.5	140.3	9.6	4.5	36.5
RICHMOND . . . . .	20	5	.6	2.7	.5	1.0	2.4	8.0	8.1	16.2	.2	.6	3.8
ROANOKE . . . . .	32	15	1.8	14.2	1.3	2.7	8.5	30.1	40.8	70.8	1.2	1.9	24.3
ROCKINGHAM . . . . .	57	24	4.4	26.7	3.8	7.5	20.6	68.0	105.4	171.7	4.4	4.1	65.6
RUSSELL . . . . .	13	6	1.0	4.3	1.0	1.9	4.0	5.8	1.3	7.0	.3	.6	2.9
SHENANDOAH . . . . .	46	23	3.8	21.1	3.5	7.1	18.3	45.3	42.8	85.3	6.3	2.2	16.2
SMYTH . . . . .	33	17	6.3	31.2	5.4	9.4	23.4	47.0	46.8	94.4	2.0	4.4	45.1
SOUTHAMPTON . . . . .	21	5	.5	3.0	.3	.5	1.6	3.2	15.5	18.6	.5	.6	7.0
SPOTSYLVANIA . . . . .	16	8	.6	4.5	.5	.8	3.2	8.5	7.6	15.0	1.1	(D)	(D)
SUSSEX . . . . .	24	8	.6	3.6	.5	1.0	2.8	8.2	12.6	20.8	.9	.5	4.3
TAZEWELL . . . . .	46	20	2.6	16.2	1.9	3.7	10.4	29.4	36.7	63.4	1.0	2.4	20.5
WARREN . . . . .	14	7	2.6	21.0	2.3	4.6	17.5	44.4	69.7	116.3	2.7	2.3	29.7
WESTMORELAND . . . . .	29	12	.7	2.9	.6	.8	2.0	6.9	8.9	16.4	1.3	.4	2.3
WISE . . . . .	22	6	.9	4.0	.7	1.3	2.6	5.8	5.1	10.8	.6	.5	4.6
WYTHE . . . . .	24	8	1.5	7.1	1.4	2.7	6.0	16.0	13.9	29.0	(D)	1.4	10.0

See footnotes at end of table.



TABLE 2. General Statistics for the State, Standard Metropolitan Statistical Areas, and Counties: 1972 and 1967—Continued

(See appendix, Explanation of Terms)

State, standard metropolitan statistical areas, and counties <sup>1</sup>	1972											1967	
	Establishments		All employees <sup>2</sup>		Production workers			Value added by manufac- ture	Cost of materials <sup>3</sup>	Value of shipments <sup>3</sup>	Capital expendi- tures, new	All employees	Value added by manufac- ture
	Total	With 20 employees or more	Number	Payroll	Number	Man-hours	Wages						
	(number)	(number)	(1,000)	(million dollars)	(1,000)	(million)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(1,000)	(million dollars)
INDEPENDENT CITIES													
ALEXANDRIA . . . . .	102	33	2.5	22.3	1.6	2.9	11.8	42.0	36.5	78.3	3.2	3.2	35.2
BEDFORD . . . . .	27	10	2.4	16.0	1.9	3.8	11.6	32.2	26.2	58.5	.6	3.0	38.5
BRISTOL . . . . .	57	29	4.6	32.3	3.3	6.9	20.7	79.1	135.3	210.7	4.9	4.5	45.6
BUENA VISTA . . . . .	15	9	1.4	9.8	1.1	2.3	6.7	29.1	38.2	67.5	1.1	1.4	21.1
CHARLOTTESVILLE . . . . .	58	21	4.1	31.6	2.6	5.4	16.4	62.5	55.4	115.7	2.6	1.9	15.7
CHESAPEAKE . . . . .	46	20	2.2	16.0	1.7	3.7	11.0	40.2	79.1	118.1	7.6	2.2	28.4
CLIFTON FORGE . . . . .	5	3	.3	1.8	.3	.5	1.2	2.5	.6	3.2	.1	.4	2.4
DANVILLE . . . . .	72	31	13.2	81.3	11.5	23.2	63.1	138.8	139.0	275.3	11.6	13.4	90.9
EMPORIA . . . . .	43	14	1.6	9.5	1.4	2.7	7.3	27.9	33.1	61.4	2.5	.9	8.8
FAIRFAX . . . . .	19	2	.3	1.5	.1	.2	.6	2.6	1.4	4.0	.1	.1	1.3
FRANKLIN . . . . .	16	9	2.7	27.6	2.0	4.3	18.4	91.4	70.9	162.3	(D)	.5	7.3
FREDERICKSBURG . . . . .	40	20	3.0	20.5	2.6	4.8	16.6	69.8	42.0	114.3	2.9	1.4	10.7
GALAX . . . . .	37	17	4.0	21.3	3.7	6.8	16.6	40.3	49.0	89.0	2.3	3.4	22.2
HAMPTON . . . . .	74	40	3.3	20.1	2.5	4.3	12.7	36.1	39.1	74.7	3.8	(D)	(D)
HARRISONBURG . . . . .	44	23	4.2	27.4	3.3	6.3	17.6	78.3	120.9	197.8	2.3	2.9	25.9
HOPEWELL . . . . .	26	9	4.5	45.5	3.3	7.1	30.5	155.3	113.6	269.7	23.9	5.0	105.5
LYNCHBURG . . . . .	128	68	18.4	157.8	12.0	25.6	84.8	302.7	215.0	512.3	17.2	14.9	176.1
MARTINSVILLE . . . . .	58	31	11.8	67.8	10.3	21.7	52.3	120.0	131.7	249.3	12.8	9.5	70.8
NEWPORT NEWS . . . . .	72	34	30.0	280.4	25.6	50.1	232.3	352.0	232.3	585.6	(D)	24.5	219.8
NORFOLK . . . . .	224	90	12.4	103.7	8.6	18.1	66.0	234.1	395.8	624.8	12.3	12.9	158.5
NORTON . . . . .	7	4	.3	1.5	.2	.3	.8	3.0	2.8	5.8	.2	(D)	(D)
PETERSBURG . . . . .	52	27	7.0	53.1	6.0	10.9	43.0	212.0	160.7	371.8	11.6	6.4	146.4
PORTSMOUTH . . . . .	55	25	8.2	57.4	6.7	13.1	36.9	160.6	187.7	340.6	3.8	3.3	40.8
RADFORD . . . . .	19	11	7.2	60.7	5.5	11.5	41.5	93.7	76.7	152.8	17.7	2.1	21.4
RICHMOND . . . . .	392	187	33.3	307.5	20.8	41.4	160.1	725.6	794.7	1 512.2	99.7	36.4	582.4
ROANOKE . . . . .	113	53	10.1	71.1	7.9	16.4	47.8	156.7	109.5	285.2	8.6	9.5	89.8
SALEM . . . . .	46	19	7.8	66.3	5.4	11.0	38.5	139.3	133.3	270.0	17.0	5.6	78.3
SOUTH BOSTON . . . . .	15	8	2.4	18.0	1.9	4.1	12.0	40.5	34.4	74.7	1.1	1.6	15.2
STAUNTON . . . . .	24	10	1.4	8.3	1.2	2.1	6.2	14.2	9.6	23.9	1.4	1.2	8.3
SUFFOLK . . . . .	60	26	3.1	18.7	2.7	5.2	14.5	100.6	187.8	287.7	5.5	2.9	61.6
VIRGINIA BEACH . . . . .	50	8	.7	4.0	.4	.8	2.3	7.0	7.4	14.3	.7	.5	3.8
WAYNESBORO . . . . .	37	21	7.2	69.1	5.0	10.0	38.3	159.5	91.8	248.7	14.2	8.1	160.0
WINCHESTER . . . . .	53	29	5.2	39.1	4.1	7.9	26.2	87.9	87.8	173.6	5.6	2.4	24.7

(NA) Not available. (D) Withheld to avoid disclosing figures for individual companies. (Z) Less than half of the unit of measurement shown.

<sup>1</sup>Some counties were withheld from publication in order to (a) avoid disclosing figures for individual companies or (b) permit further checking of the figures for smaller counties. Additional detail will appear in the final report for this State.<sup>2</sup>Includes employment and payroll at central administrative offices and auxiliary units. (For a definition of these units, see appendix.)<sup>3</sup>The total cost of materials and value of shipments may include extensive duplication arising from shipments between establishments in the same industry classification. (For a more complete explanation, see appendix.)<sup>4</sup>The standard metropolitan statistical areas in this State are defined as follows:

KINGSPORT-BRISTOL, TN-VA, SMSA: Consists of Hawkins and Sullivan Counties, TN, and Bristol city, and Scott and Washington Counties, VA.

LYNCHBURG SMSA: Consists of Lynchburg city, and Amherst, Appomattox, and Campbell Counties, VA.

NEWPORT NEWS-HAMPTON SMSA: Consists of Hampton, Newport News, and Williamsburg cities, and Gloucester, James City, and York Counties, VA.

NORFOLK-VIRGINIA BEACH-PORTSMOUTH, VA-NC, SMSA: Consists of Chesapeake, Nansemond, Norfolk, Portsmouth, Suffolk, and Virginia Beach cities, VA, and Currituck County, NC.

PETERSBURG-COLONIAL HEIGHTS-HOPEWELL SMSA: Consists of Colonial Heights, Hopewell, and Petersburg cities, and Dinwiddie and Prince George Counties, VA.

RICHMOND SMSA: Consists of Richmond city, and Charles City, Chesterfield, Goochland, Hanover, Henrico, and Powhatan Counties, VA.

ROANOKE SMSA: Consists of Roanoke and Salem cities, and Botetourt, Craig, and Roanoke Counties, VA.

WASHINGTON, DC-MD-VA, SMSA: Consists of the District of Columbia; Charles, Montgomery, and Prince Georges Counties, MD; and Alexandria, Fairfax, and Falls Church cities, and Arlington, Fairfax, Loudoun, and Prince William Counties, VA.

TABLE 3. General Statistics for the State, by Industry Groups and Industries: 1972 and 1967

(See appendix, Explanation of Terms)

Code	Industry	1972											1967	
		Establishments		All employees		Production workers			Value added by manufacture	Cost of materials <sup>1</sup>	Value of shipments <sup>1</sup>	Capital expenditures, new	All employees	Value added by manufacture
		Total	With 20 employees or more	Number	Payroll	Number	Man hours	Wages						
		(number)	(number)	(1,000)	(million dollars)	(1,000)	(million)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(1,000)	(million dollars)
	ALL INDUSTRIES, TOTAL <sup>2</sup> . . . . .	4 807	1 754	376.4	2 384.7	244.5	582.5	1 301.0	6 121.2	6 729.9	12 780.9	582.6	339.8	4 067.7
20	FOOD AND KINDRED PRODUCTS . . . . .	507	283	33.8	220.3	24.2	46.8	131.4	612.8	1 361.3	1 965.3	61.6	31.5	392.7
201	MEAT PRODUCTS . . . . .	69	38	9.6	61.0	8.2	16.8	45.9	125.5	499.5	623.0	9.6	7.4	74.9
2011	MEATPACKING PLANTS . . . . .	35	15	4.2	31.6	3.1	6.6	20.8	63.6	286.6	348.9	5.2	4.3	52.4
2016	POULTRY DRESSING PLANTS . . . . .	12	12	4.3	22.4	4.0	8.0	19.9	46.1	171.3	216.9	2.9	(NA)	(NA)
202	DAIRY PRODUCTS . . . . .	47	34	2.9	23.5	1.1	2.3	7.4	58.0	139.9	197.1	11.9	4.2	45.7
2024	ICE CREAM AND FROZEN DESSERTS . . . . .	9	4	.3	3.0	.1	.2	.8	4.8	13.7	18.5	.4	.5	3.9
2026	FLUID MILK . . . . .	35	28	2.5	19.7	.9	1.9	6.0	48.7	120.3	168.8	(D)	3.4	38.5
203	PRESERVED FRUITS AND VEGETABLES . . . . .	45	18	3.7	21.4	3.2	5.7	15.1	53.2	86.8	140.0	3.1	(NA)	(NA)
204	GRAIN MILL PRODUCTS . . . . .	52	15	1.0	6.4	.7	1.5	3.9	19.2	91.5	110.0	.9	.9	14.3
205	BAKERY PRODUCTS . . . . .	49	37	4.6	35.2	2.8	5.7	19.1	81.4	68.6	150.2	2.6	4.6	54.3
206	SUGAR AND CONFECTIONERY PRODUCTS . . . . .	22	13	2.7	14.5	2.4	4.6	11.8	69.8	156.3	225.9	3.2	(NA)	(NA)
207	FATS AND OILS . . . . .	18	12	.7	5.8	.6	1.3	3.8	26.2	95.6	119.7	1.8	(NA)	(NA)
208	BEVERAGES . . . . .	64	50	4.0	30.3	1.8	3.7	10.9	86.8	120.4	204.1	24.9	4.1	57.0
2086	BOTTLED AND CANNED SOFT DRINKS . . . . .	55	45	3.5	24.3	1.4	2.9	7.0	53.7	80.2	133.5	(D)	3.8	50.0
209	MISC. FOODS AND KINDRED PRODUCTS . . . . .	141	66	4.4	22.0	3.6	5.3	13.6	92.5	102.9	195.3	3.6	(NA)	(NA)
2092	FRESH OR FROZEN PACKAGED FISH . . . . .	76	35	2.2	7.6	2.0	2.7	6.0	14.7	26.7	41.4	.6	2.1	10.3
2099	FOOD PREPARATIONS, NEC . . . . .	30	18	1.5	11.3	1.0	1.8	5.8	70.8	67.9	138.7	2.7	1.0	37.3
21	TOBACCO PRODUCTS . . . . .	21	18	14.3	122.3	11.6	21.5	89.4	556.7	781.5	1 339.2	75.7	13.7	421.8
2141	TOBACCO STEMMING AND REDRYING . . . . .	13	11	2.5	16.8	2.0	3.8	10.9	36.9	351.6	389.1	6.2	2.6	21.4
22	TEXTILE MILL PRODUCTS . . . . .	106	89	40.5	243.8	35.9	73.9	197.0	456.7	659.2	1 107.0	70.7	38.4	328.3
2211	WEAVING MILLS, COTTON . . . . .	5	5	3.1	18.5	2.9	5.9	16.1	34.4	34.9	68.1	(D)	FF	(D)
2221	WEAVING MILLS, SYNTHETICS . . . . .	19	19	13.7	85.9	12.4	25.9	72.0	148.2	171.5	316.5	11.0	FF	(D)
2241	NARROW FABRIC MILLS . . . . .	10	8	2.1	11.3	1.9	3.8	9.6	18.4	19.7	37.4	.9	1.8	15.1
225	KNITTING MILLS . . . . .	35	29	11.9	64.6	10.4	20.7	50.1	113.1	203.9	316.1	22.9	7.7	52.3
2251	WOMEN'S HOSIERY, EXCEPT SOCKS . . . . .	7	6	1.3	5.9	1.1	1.9	4.2	14.6	9.6	23.9	.8	.9	5.9
2252	HOSIERY, NEC . . . . .	7	5	.6	3.0	.6	1.0	2.3	5.4	5.5	10.9	.1	.7	3.9
2253	KNIT OUTERWEAR MILLS . . . . .	8	8	4.1	21.5	3.7	6.7	16.5	38.6	31.9	68.3	5.8	FF	(D)
226	TEXTILE FINISHING, EXCEPT WOOL . . . . .	11	10	4.3	29.2	3.6	8.0	22.6	76.3	134.9	208.6	14.2	2.8	24.0
229	MISCELLANEOUS TEXTILE GOODS . . . . .	10	4	.8	4.5	.7	1.3	3.9	7.3	30.5	38.7	.2	1.0	9.6
23	APPAREL, OTHER TEXTILE PRODUCTS . . . . .	240	192	39.2	175.3	36.1	66.0	150.4	297.2	172.1	463.5	17.0	30.4	157.9
2311	MEN'S AND BOYS' SUITS AND COATS . . . . .	9	6	3.8	21.2	3.3	5.5	17.1	28.0	9.2	38.0	.1	FF	(D)
232	MEN'S AND BOYS' FURNISHINGS . . . . .	50	47	12.9	54.3	12.0	22.0	47.3	101.4	71.4	171.8	3.2	11.0	63.7
2321	MEN'S AND BOYS' SHIRTS AND NIGHTWEAR . . . . .	19	17	4.7	18.5	4.4	7.9	16.6	29.2	10.9	40.1	1.2	2.8	16.4
2327	MEN'S AND BOYS' SEPARATE TROUSERS . . . . .	11	11	3.0	13.7	2.8	5.1	11.4	18.7	14.1	32.6	.8	3.8	21.1
2328	MEN'S AND BOYS' WORK CLOTHING . . . . .	16	15	3.7	16.0	3.4	6.2	13.7	41.9	38.5	80.2	.8	2.8	18.7
233	WOMEN'S AND MISSES' OUTERWEAR . . . . .	83	75	13.2	58.8	12.3	23.1	52.1	96.1	33.5	126.7	7.3	6.9	33.2
2339	WOMEN'S, MISSES' OUTERWEAR, NEC . . . . .	29	29	5.1	23.8	4.8	9.1	21.7	34.2	17.7	51.1	(D)	EE	(D)
234	WOMEN'S, CHILDREN'S UNDERGARMENTS . . . . .	11	10	1.9	7.8	1.7	3.3	6.7	8.5	3.7	14.2	.6	FF	(D)
2341	WOMEN'S AND CHILDREN'S UNDERWEAR . . . . .	11	10	1.9	7.8	1.7	3.3	6.7	8.5	3.7	14.2	.6	FF	(D)
235	HATS, CAPS, AND MILLINERY . . . . .	6	3	.6	2.6	.5	.8	2.1	3.4	2.6	6.1	(D)	.7	3.3
236	CHILDREN'S OUTERWEAR . . . . .	23	22	3.7	15.0	3.5	5.9	13.5	31.3	20.1	48.4	2.2	3.3	13.2
2369	CHILDREN'S OUTERWEAR, NEC . . . . .	7	5	1.6	6.6	1.5	2.7	5.8	12.5	11.8	23.8	1.8	1.3	4.8
238	MISC. APPAREL AND ACCESSORIES . . . . .	9	9	1.3	5.5	1.2	2.4	4.8	8.5	4.2	11.7	(D)	.5	2.6
239	MISC. FABRICATED TEXTILE PRODUCTS . . . . .	49	17	1.8	10.2	1.5	2.9	6.8	19.9	27.4	46.6	(D)	2.1	12.6
24	LUMBER AND WOOD PRODUCTS . . . . .	1 411	204	21.9	128.2	18.7	36.2	95.6	280.2	374.8	676.5	29.6	(NA)	(NA)
2411	LOGGING CAMPS, LOGGING CONTRACTORS . . . . .	581	14	1.9	9.0	1.8	3.0	8.0	19.2	22.1	41.3	2.3	2.0	14.6
242	SAWMILLS AND PLANING MILLS . . . . .	613	84	7.1	40.0	6.3	12.3	32.7	80.6	109.2	190.7	11.3	9.0	62.2
2421	SAWMILLS AND PLANING MILLS, GENERAL . . . . .	578	69	5.1	29.2	4.5	8.5	23.8	64.5	89.9	154.9	10.4	6.8	49.2
2426	HARDWOOD DIMENSION AND FLOORING . . . . .	22	13	1.8	9.9	1.7	3.5	8.1	14.2	17.9	32.5	.8	(NA)	(NA)
243	MILLWORK, PLYWOOD, STRIP, MERCHANDISE . . . . .	110	45	6.0	37.2	4.8	9.7	25.9	88.6	150.0	238.3	9.1	(NA)	(NA)
2431	MILLWORK . . . . .	46	21	3.0	18.1	2.3	4.3	11.7	35.7	69.5	105.9	2.0	(NA)	(NA)
244	WOOD CONTAINERS . . . . .	30	21	1.5	6.7	1.3	2.3	5.2	11.3	14.4	25.7	1.3	(NA)	(NA)
2448	WOOD PALLETS AND SKIDS . . . . .	18	16	.9	4.1	.8	1.2	2.9	6.7	10.0	16.7	(D)	(NA)	(NA)
245	WOOD BUILDINGS AND MOBILE HOMES . . . . .	20	16	2.8	17.5	2.3	4.5	10.9	43.2	63.5	106.5	2.0	(NA)	(NA)
2451	MOBILE HOMES . . . . .	3	7	1.0	5.9	.9	1.8	4.4	10.4	25.9	36.3	.3	(NA)	(NA)
2452	PREFABRICATED WOOD BUILDINGS . . . . .	11	9	1.8	11.6	1.4	2.7	6.5	32.7	37.5	70.2	1.8	(NA)	(NA)
249	MISCELLANEOUS WOOD PRODUCTS . . . . .	57	24	2.7	17.8	2.2	4.4	12.8	38.3	35.5	73.9	3.6	(NA)	(NA)
25	FURNITURE AND FIXTURES . . . . .	1 741	125	17.1	167.1	11.0	50.7	1 000.8	338.2	1 000.4	639.7	11.1	24.2	240.4
251	HOUSEHOLD FURNITURE . . . . .	1 741	125	17.1	167.1	11.0	50.7	1 000.8	338.2	1 000.4	639.7	11.1	24.2	240.4
2512	UPHOLSTERED HOUSEHOLD FURNITURE . . . . .	17	17	2.7	17.1	2.3	4.8	12.9	32.1	36.0	67.3	(D)	(NA)	(NA)
2514	METAL HOUSEHOLD FURNITURE . . . . .	7	7	1.7	17.1	1.0	3.0	6.8	18.0	19.4	38.2	(D)	1.0	11.2

See footnotes at end of table.



TABLE 3. General Statistics for the State, by Industry Groups and Industries: 1972 and 1967—Continued

(See appendix, Explanation of Terms)

Code	Industry	1972											1967	
		Establishments		All employees		Production workers			Value added by manufacture	Cost of materials <sup>1</sup>	Value of shipments <sup>1</sup>	Capital expenditures, 1967	All employees	Value added by manufacture
		Total	With 20 employees or more	Number	Payroll	Number	Man-hours	Wages	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(1,000)	(million dollars)
		(number)	(number)	(1,000)	(million dollars)	(1,000)	(million)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(1,000)	(million dollars)
2515	MATTRESSES AND BEDSPRINGS. . . . .	12	6	0.4	2.4	0.3	0.6	1.4	5.0	6.5	11.5	0.2	BE	(D)
2519	HOUSEHOLD FURNITURE, NEC. . . . .	3	3	.3	1.3	.3	.5	.8	2.0	1.7	3.6	.4	(NA)	(NA)
254	PARTITIONS AND FIXTURES. . . . .	16	5	1.0	8.3	.7	1.2	5.6	14.0	10.4	23.3	.3	1.2	9.9
26	PAPER AND ALLIED PRODUCTS. . . . .	91	61	13.5	127.8	10.5	23.0	90.2	304.4	330.2	634.0	36.0	13.2	230.7
2631	PAPERBOARD MILLS. . . . .	10	9	4.8	53.2	3.7	8.3	38.0	137.6	117.7	254.7	24.2	5.0	123.0
2643	BAGS, EXCEPT TEXTILE BAGS. . . . .	12	9	1.4	9.2	1.2	2.3	7.2	19.9	42.5	62.7	.6	1.2	13.0
265	PAPERBOARD CONTAINERS AND BOXES. . .	43	28	3.7	30.8	3.0	6.6	21.7	54.6	93.4	147.6	3.4	3.1	31.8
2651	FOLDING PAPERBOARD BOXES. . . . .	6	5	.9	7.9	.8	1.8	6.5	13.4	30.0	43.4	1.1	CC	(D)
2653	CORRUGATED AND SOLID FIBER BOXES. .	22	16	2.2	18.7	1.7	3.7	12.3	33.1	49.0	81.9	1.9	1.7	19.6
27	PRINTING AND PUBLISHING. . . . .	607	129	15.4	118.7	9.4	17.8	65.9	227.0	115.5	341.6	12.3	12.7	139.4
2711	NEWSPAPERS. . . . .	118	41	6.3	48.3	2.9	5.3	19.6	94.4	28.1	122.5	6.8	5.3	56.5
273	BOOKS. . . . .	21	8	1.3	10.0	1.0	2.0	6.7	17.2	7.3	24.4	.4	.9	9.8
2731	BOOK PUBLISHING. . . . .	13	4	.4	2.6	.2	.4	1.2	4.7	1.4	6.1	.1	.2	2.4
2732	BOOK PRINTING. . . . .	8	4	1.0	7.4	.8	1.6	5.5	12.5	5.8	18.3	.3	.7	7.4
2741	MISCELLANEOUS PUBLISHING. . . . .	19	4	.9	6.1	.2	.3	1.3	11.1	.7	12.0	.1	CC	(D)
275	COMMERCIAL PRINTING. . . . .	346	52	4.8	37.7	3.8	7.0	26.4	67.8	58.3	125.3	3.7	(NA)	(NA)
2761	MANIFOLD BUSINESS FORMS. . . . .	12	6	.8	5.9	.6	1.3	4.5	14.7	13.5	28.0	.8	.6	6.7
278	BLANKBOOKS AND BOOKBINDING. . . . .	15	6	.6	3.8	.5	1.0	3.0	8.1	3.6	11.7	.4	.2	2.2
2782	BLANKBOOKS AND LOOSELEAF BINDERS. .	6	5	.4	2.3	.3	.6	1.9	6.0	2.5	8.5	.2	(NA)	(NA)
279	PRINTING TRADE SERVICES. . . . .	47	7	.5	5.6	.4	.8	4.3	10.1	1.9	12.0	.1	(NA)	(NA)
28	CHEMICALS AND ALLIED PRODUCTS. . .	141	57	32.4	321.1	22.7	44.6	192.9	830.6	610.2	1 428.4	66.8	40.9	762.0
281	INDUSTRIAL INORGANIC CHEMICALS. . .	18	7	.8	8.5	.4	.9	3.6	36.4	26.4	61.7	.8	(NA)	(NA)
282	PLASTICS MATERIALS AND SYNTHETICS. .	11	9	19.6	198.8	14.6	28.5	129.7	463.6	341.8	810.8	51.8	(NA)	(NA)
2851	PAINTS AND ALLIED PRODUCTS. . . . .	18	12	.6	5.0	.3	.7	2.2	14.0	16.5	30.4	.8	.4	6.8
287	AGRICULTURAL CHEMICALS. . . . .	32	14	1.6	11.0	1.0	2.1	6.6	20.3	57.7	78.8	1.3	(NA)	(NA)
30	RUBBER AND MISC. PLASTICS PROD. . .	74	42	11.3	96.2	8.9	18.1	67.0	260.1	199.0	457.3	39.4	(NA)	(NA)
3079	MISCELLANEOUS PLASTICS PRODUCTS. . .	53	28	6.6	57.1	5.2	10.2	39.7	153.5	116.2	267.9	17.8	(NA)	(NA)
31	LEATHER AND LEATHER PRODUCTS. . .	25	18	4.3	19.6	4.0	7.4	17.5	29.7	35.5	66.1	.3	5.0	28.1
32	STONE, CLAY, AND GLASS PRODUCTS. .	281	123	10.5	77.7	8.0	16.4	53.6	189.3	150.6	337.5	17.6	10.0	128.0
3231	PRODUCTS OF PURCHASED GLASS. . . . .	8	8	.9	6.6	.8	1.4	4.0	16.3	22.2	37.5	1.0	.8	14.4
325	STRUCTURAL CLAY PRODUCTS. . . . .	14	11	1.0	6.0	.8	1.7	4.8	13.4	5.8	19.4	1.2	1.0	10.4
327	CONCRETE, GYPSUM, PLASTER PRODUCTS	216	85	5.9	44.5	4.3	8.9	29.6	108.0	95.3	202.7	10.5	5.1	65.3
3271	CONCRETE BLOCK AND BRICK. . . . .	36	20	1.0	7.2	.6	1.4	4.1	18.1	17.0	34.8	1.1	.6	7.4
3272	CONCRETE PRODUCTS, NEC. . . . .	77	30	2.0	15.5	1.6	3.5	11.0	28.1	19.8	47.7	2.9	2.0	20.8
3273	READY-MIXED CONCRETE. . . . .	96	29	2.2	15.6	1.5	2.7	9.9	43.0	44.1	87.2	5.7	1.7	24.7
329	MISC. NONMETALLIC MINERAL PRODUCTS	19	11	1.5	11.0	1.3	2.5	8.4	22.5	14.6	37.1	1.6	(NA)	(NA)
3295	MINERALS, GROUND OR TREATED. . . . .	11	5	.3	2.3	.2	.5	1.7	5.1	5.2	10.2	.6	(NA)	(NA)
33	PRIMARY METAL INDUSTRIES. . . . .	44	31	8.2	74.5	7.2	15.3	62.1	148.8	206.4	353.9	34.7	6.6	93.3
331	BLAST FURNACE, BASIC STEEL PROD. . .	7	6	1.1	11.3	1.0	2.3	9.2	22.7	38.2	61.4	(D)	.7	11.4
332	IRON AND STEEL FOUNDRIES. . . . .	18	14	5.0	43.8	4.5	9.6	38.1	82.6	53.6	135.8	9.2	FF	(D)
335	NONFERROUS ROLLING AND DRAWING. . .	9	7	1.9	17.2	1.5	3.1	13.2	35.7	89.1	123.1	14.9	EE	(D)
34	FABRICATED METAL PRODUCTS. . . . .	235	112	14.5	123.0	10.8	22.1	81.4	284.7	306.2	589.2	10.3	(NA)	(NA)
343	PLUMBING, HEATING, EXC. ELECTRIC. .	5	4	.5	3.3	.3	.5	1.8	10.8	9.6	20.4	.4	(NA)	(NA)
344	FABRICATED STRUCTURAL METAL PROD. .	142	72	9.3	82.0	6.8	14.1	52.3	186.7	179.7	366.1	6.7	6.6	72.2
3441	FABRICATED STRUCTURAL METAL PRODUCTS	39	24	3.1	27.4	2.3	5.0	17.6	53.6	76.3	128.3	3.2	2.8	31.1
3442	METAL DOORS, SASH, AND TRIM. . . . .	21	12	1.4	9.4	1.0	1.9	5.6	19.1	19.7	38.1	.9	.8	7.2
3443	FABRICATED PLATEWORK (BOILER SHOP). .	18	15	3.4	31.9	2.4	4.8	20.1	93.0	54.7	150.5	.9	1.5	17.9
346	METAL FORGINGS AND STAMPINGS. . . .	7	3	.3	2.2	.2	.5	1.7	3.5	2.8	6.3	.2	(NA)	(NA)
349	MISC. FABRICATED METAL PRODUCTS. . .	46	16	1.7	12.8	1.3	2.4	9.0	29.8	51.1	80.8	1.3	(NA)	(NA)
3496	MISC. FABRICATED WIRE PRODUCTS. . . .	14	3	.4	2.4	.2	.4	1.2	3.8	4.4	9.4	.2	(NA)	(NA)
35	MACHINERY, EXCEPT ELECTRICAL. . .	313	84	10.1	82.9	7.4	14.6	54.2	196.5	153.9	345.8	12.0	8.8	110.9
353	CONSTRUCTION AND RELATED MACHINERY	30	16	2.2	17.3	1.5	2.9	10.0	47.2	49.3	92.9	1.2	.9	16.5
3532	MINING MACHINERY. . . . .	16	7	.8	5.7	.5	1.0	3.1	14.2	21.3	32.9	.6	.4	6.1
354	METALWORKING MACHINERY. . . . .	21	8	.7	6.6	.5	1.1	4.3	17.8	6.6	24.1	.4	.3	3.2
3544	SPECIAL DIES, TOOLS, JIGS, FIXTURES. .	13	6	.3	2.9	.2	.5	2.1	4.3	.9	5.2	.3	.2	2.8
355	SPECIAL INDUSTRY MACHINERY. . . . .	33	14	1.6	13.7	1.1	2.1	9.0	39.1	20.0	54.6	2.6	1.5	22.4
3559	SPECIAL INDUSTRY MACHINERY, NEC. . .	12	5	.6	4.6	.4	.8	3.2	10.5	7.1	17.3	.4	BE	(D)
356	GENERAL INDUSTRIAL MACHINERY. . . .	22	5	.9	7.1	.7	1.5	5.5	21.9	21.3	41.4	(D)	.9	16.4
357	OFFICE AND COMPUTING MACHINES. . . .	9	4	.5	4.1	.4	.7	2.2	15.7	4.6	21.2	.1	EE	(D)
358	REFRIGERATION, SERVICE MACHINERY. .	16	8	2.3	18.6	1.7	3.1	12.0	27.6	38.1	70.9	3.1	EE	(D)
359	MISC. MACHINERY, EXCEPT ELECTRICAL	170	24	1.7	13.6	1.4	2.7	10.0	24.1	10.3	34.0	2.7	(NA)	(NA)

See footnotes at end of table.

TABLE 3. General Statistics for the State, by Industry Groups and Industries: 1972 and 1967—Continued

(See appendix, Explanation of Terms)

Code	Industry	1972										1967		
		Establishments		All employees		Production workers			Value added by manufacture	Cost of materials <sup>1</sup>	Value of shipments <sup>1</sup>	Capital expenditures, new	All employees	Value added by manufacture
		Total	With 20 employees or more	Number	Payroll	Number	Man-hours	Wages						
		(number)	(number)	(1,000)	(million dollars)	(1,000)	(million)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(1,000)	(million dollars)
36	ELECTRIC, ELECTRONIC EQUIPMENT .	129	65	29.8	254.8	20.6	42.2	126.1	520.8	383.1	892.8	34.7	(NA)	(NA)
361	ELECTRIC DISTRIBUTING EQUIPMENT. .	7	4	1.6	11.7	1.1	2.2	7.0	26.2	24.9	51.2	.6	(NA)	(NA)
362	ELECTRICAL INDUSTRIAL APPARATUS. .	24	13	6.0	52.3	4.1	8.1	28.2	108.4	67.5	175.0	(D)	FF	(D)
366	COMMUNICATION EQUIPMENT. . . . .	33	17	9.1	89.3	5.2	12.1	35.2	178.9	92.2	257.5	7.3	FF	(D)
367	ELECTRONIC COMPONENTS AND ACCESS .	29	17	4.8	45.5	3.0	6.0	17.3	71.4	32.7	112.2	14.7	4.3	33.3
371	MOTOR VEHICLES AND EQUIPMENT . . .	34	16	4.0	38.6	3.3	7.1	28.9	133.2	231.1	357.5	4.7	3.0	63.3
3713	TRUCK AND BUS BODIES . . . . .	14	7	.7	5.4	.6	1.1	3.6	11.2	13.4	24.6	.3	CC	(D)
3732	BOAT BUILDING AND REPAIRING. . . . .	40	2	.4	3.1	.4	.7	2.0	5.4	4.8	10.4	.3	.5	4.3
384	MEDICAL INSTRUMENTS AND SUPPLIES .	17	5	.3	2.5	.2	.4	1.6	5.3	2.6	7.7	.5	(NA)	(NA)
39	MISC. MANUFACTURING INDUSTRIES .	119	29	3.9	25.2	3.2	6.0	17.1	39.2	42.1	80.8	1.2	3.7	34.7
395	PENS, PENCILS, OFFICE, ART GOODS .	13	4	.3	1.5	.2	.4	.9	3.1	2.6	5.7	.1	.2	1.4
399	MISCELLANEOUS MANUFACTURES . . . .	74	16	1.4	9.6	1.1	2.0	6.3	20.9	15.6	36.2	(D)	1.1	10.7
3993	SIGNS AND ADVERTISING DISPLAYS . . .	41	8	.7	5.1	.6	.9	3.3	9.4	5.4	14.8	.4	.6	4.9
3999	MANUFACTURING INDUSTRIES, NEC. . . .	27	5	.5	3.5	.4	.8	2.2	9.5	8.5	17.7	(D)	.3	4.4
--	ADMINISTRATIVE AND AUXILIARY . .	139	81	11.1	126.3	-	-	-	-	-	-	-	8.2	-

Note: The following symbols indicate employment size range for 1967:

AA less than 250 employees

EE 1,000 to 2,499 employees

BB 250 to 499 employees

FF 2,500 employees and over

CC 500 to 999 employees

- Represents zero. (NA) Not available. Because of a revision to this industry or industry group in the 1972 edition of the SIC manual, 1967 census data are not available on a comparable basis. (D) Withheld to avoid disclosing figures for individual companies.

<sup>1</sup>The total cost of materials and value of shipments for industry groups shown may include extensive duplication arising from shipments between establishments in the same industry classification. (For a more complete explanation, see appendix.)

<sup>2</sup>Includes figures for industry groups which have been withheld from publication in order to (a) avoid disclosing figures for individual companies or (b) permit further checking of figures for smaller industry groups. Additional detail will appear in the final report for this State.



## Appendix A. SCOPE AND COVERAGE

This report is one of a series presenting preliminary information, by State, from the 1972 Census of Manufactures. The data will be superseded in a final report which, in turn, will be included in *Volume III, Area Statistics, 1972 Census of Manufactures*. The final report will include a comprehensive discussion of the concepts and definitions used in the census.

The census of manufactures covers each manufacturing establishment in the United States with one paid employee or more; manufacturing establishments with no employees are excluded. Firms which operated more than one establishment were required to file a separate report for each location. Companies which engaged in distinctly different lines of activity at one location were asked to submit separate reports if the company records permitted such a separation and the activities were of significant size.

This report includes figures for administrative offices, warehouses, garages, or other auxiliary units which service manufacturing establishments.

In the 1972 census, the approximately 120,000 manufacturing establishments with fewer than 10 employees were excused from filing reports. Under special arrangements which safeguarded the confidentiality of both tax and census records, data on payrolls, sales, and industry classification from the administrative records of the Social Security Administration and the Internal Revenue Service were made available to the Census Bureau for use in the 1972 Economic Censuses (retail and wholesale trade, service industries, construction industries, manufactures, and mineral industries). Estimates for data other than payrolls and sales for these small establishments were constructed from industry averages. The effect on industry aggregates is slight in most industries. For manufacturing as a whole, these small establishments account for less than 3 percent of the payrolls and value added.

Establishments are classified by industry in accordance with industry definitions described in the 1972 edition of the Standard Industrial Classification (SIC) Manual. For 1972, the SIC was significantly revised and the comparability with prior year's data for some industries was significantly affected. The comparability at the 2- and 3-digit SIC levels was less affected. The final volumes of the 1972 Census of Manufactures will contain a table relating aggregates based on the 1972 SIC with aggregates derived from classifying establishments according to the 1967 SIC definitions.

As in earlier censuses, a number of small establishments may have been misclassified as to industry. However, such possible misclassifications have significant effect on *none* of the statistics except the number of establishments. As indicated above, report forms were not mailed to very small establishments (fewer than 10 employees). The industry classifications for these establishments were assigned on the basis of brief descriptions of the general activity of the establishment. Where the description is incomplete or there are relatively fine lines of demarcation among industries or between manufacturing and nonmanufacturing activity, the code assigned to an establishment could differ from that which would have been assigned on the basis of more complete product information. Therefore, the total establishment count for individual industries should be viewed as an approximation rather than a precise measurement. The counts for establishments with 20 employees or more are more reliable than the total number of establishments.

More detailed figures for this State will appear in the final census reports. Final reports will also include a comprehensive discussion of such concepts as "industry" and "establishment," as well as the various statistical items such as "employment," "value of shipments," and "value added." Similar preliminary and final reports will be issued for other States during the coming months. A series of preliminary summary reports showing U.S. totals for each manufacturing industry and for each State are being issued. Final industry reports and final area reports will be published during 1974.

Order forms describing the individual reports and listing their prices may be obtained from any U.S. Department of Commerce district office or from the Publications Distribution Section, Social and Economic Statistics Administration, Washington, D.C. 20233.

The 1972 Census of Manufactures is the 29th census of manufacturing establishments in the United States. For 1972, it was conducted jointly with the censuses of mineral industries, construction industries, retail trade, wholesale trade, and selected services under authority of Title 13 of the United States Code. Title 13 specifies that a census of manufactures be conducted every 5 years and, as amended, to cover years ending in "2" and "7". Title 13 also authorizes an annual sample survey of manufacturing establishments in interim years.



## Appendix B. EXPLANATION OF TERMS

*(For a more complete discussion of these terms and the method of compiling the Census of Manufactures, see the "Introduction" to the 1967 Census of Manufactures, Volume III).*

**All Employees**—All full-time and part-time employees on the payrolls of operating manufacturing establishments for any part of the pay period ending nearest the 12th of the months specified on the report form. Included are all persons on paid sick leave, paid holidays, and paid vacations during these pay periods. Officers of corporations are included as employees; proprietors and partners of unincorporated firms are excluded. The "all employee" number is the average number of production workers for the midmonth payroll period of March, May, August, and November plus the number of nonproduction employees in mid-March.

**Number of Production Workers**—Workers (up through the working foreman level) engaged in fabricating, processing, assembling, inspecting, receiving, packing, warehousing, shipping (but not delivering), and maintenance, repair, janitorial, and watchman services, product development, auxiliary production for plant's own use (e.g., powerplant), recordkeeping, and other closely associated services. Proprietors and partners are excluded.

**Payroll**—This item includes all forms of compensation such as salaries, wages, commissions, dismissal pay, bonuses, vacation and sick leave pay, and compensation in kind, prior to such deductions as employees' Social Security contributions, withholding taxes, group insurance, union dues, and savings bonds. The total includes salaries of officers of these establishments, if a corporation; it excludes payments to the proprietor or partners, if an unincorporated concern. Respondents were told that in reporting they could follow the definition of payrolls used for calculating the Federal withholding tax.

**Man-Hours of Production Workers**—This total relates to production-worker man-hours worked or paid for at the plant including actual overtime hours (not straight-time equivalent hours). It excludes hours paid for vacation, holidays, or sick leave when the employee was not at the plant.

**Cost of Materials**—The term "Cost of Materials" refers to charges actually paid or payable for items consumed or put into production during the year, including freight and other direct charges incurred by the establishment in acquiring these materials. It includes the cost of materials or fuel consumed regardless of

whether these items were purchased by the establishment from other companies, transferred to it from other establishments of the same company, or withdrawn from inventory during the year. The establishment was requested to value materials transferred from other parts of the company at its approximate market value, not at cost of production. The important components of this cost item are (a) all raw materials, semifinished goods, parts, components, containers, scrap, and supplies put into production or used as operating supplies and for repair and maintenance during the year; (b) electric energy purchased; (c) fuels consumed for heat, power, or the generation of electricity; (d) work done by others on materials or parts furnished by manufacturing establishments (contract work); and (e) products bought and resold in the same condition.

**Value of Shipments**—The value of shipments is the received or receivable net selling value, f.o.b. plant (exclusive of freight and taxes), of all products shipped, both primary and secondary, as well as all miscellaneous receipts such as receipts for contract work performed for others, installation and repair, sales of scrap, and sale of products bought and resold without further processing. Included are all items made by the establishment or for it under contract from materials owned by it whether sold, transferred to other plants of the same company, or shipped on consignment. The net selling value of products made in one plant on a contract basis from materials owned by another was reported by the plant providing the materials.

In the case of multiunit companies, the manufacturer was requested to report the value of products transferred to other establishments of the same company at full economic value; i.e., to include not only the direct costs of production but also a reasonable proportion of "all other costs" (including company overhead) and profit.

**Duplication in Cost of Materials and Value of Products**—The aggregate cost of materials and value-of-shipments figures for industry groups and for all manufacturing industries may include large amounts of duplication since the products of some industries are used as materials by others. With some important exceptions, such as motor vehicles and parts, this duplication is not significant within individual industries but arises from the addition of the totals of related industries in successive stages of the production of a finished manufactured product. Examples are the addition of flour mills to bakeries in the food group and the addition of pulp mills to paper mills in the paper and allied products group of industries. Esti-



mates of this duplication indicate that the value of manufactured products exclusive of such duplication—the value of finished manufactures—approximates two-thirds of the total value of products.

Prior to 1962, the Bureau of the Census did not publish figures for cost of materials or value of shipments if they contained significant duplication. Effective with the 1962 annual survey these figures were shown at all industry levels for the United States to meet the requests for their use in studies in which the presence of an indeterminate amount of duplication is not a limiting factor. However, they are appropriately footnoted. Effective with the 1964 annual survey, these industry group totals are also shown at the State, standard metropolitan statistical area, and large-county level.

Even where there is no significant amount of duplication, value-of-shipments figures are deficient as measures of the relative economic importance of individual manufacturing industries or geographic areas because of the wide variation in ratio of materials, labor, and other processing costs to value of shipments among industries.

**Value Added by Manufacture**—This measure of manufacturing activity is derived by subtracting the cost of materials, supplies, containers, fuel, purchased electricity, and cost of resales contract work from the value of shipments for products manufactured plus resales and receipts for services rendered. The result of this calculation is adjusted by the net change in finished goods and work-in-process inventories between the beginning and end of the year. (In the few industries that report value of production rather than value of shipments, only changes in work-in-process inventories are used to adjust value added. In the shipbuilding and repairing industry, no inventory adjustment is made.)

“Value added” avoids the duplication in the value of shipments figure which results from the use of products of some establishments as materials by others. Value added is considered to be the best value measure available for comparing the relative economic importance of manufacturing among industries and geographic areas.

**Expenditures for Plant and Equipment**—Manufacturing establishments in operation and establishments under construction but not yet in operation, were asked to report their expenditures for (a) permanent additions and major alterations to the manufacturing establishment, and (b) new machinery and equipment used for replacement purposes and additions to plant capacity if they are of the type for which depreciation accounts are ordinarily maintained.

These totals exclude expenditures for new facilities and equipment leased from nonmanufacturing concerns; new facilities owned by the Federal Government but operated under contract by private companies; and plant and equipment furnished to the manufacturer by communities and nonprofit organizations. Expenditures for used plant and equipment (although reported in the census), expenditures for land, and cost of maintenance and repairs charged as current operating expense are also omitted from the figures for new capital expenditures.

**Central Administrative Offices and Auxiliary Units**—In the 1972 census as in previous years, respondents were asked to file separate reports for central administrative offices or auxiliary units which were (1) at different locations from the establishments served or, (2) at the same location as one of these establishments but were not operated as an integral part thereof and served two or more establishments. The functions of employees in central administrative offices include general company policy determination, planning and management (that is, company purchasing, accounting, general engineering, direction of company personnel matters, and legal and patent matters). Auxiliaries are storage facilities, garages, repair shops, purchasing offices, sales promotion offices, and research laboratories serving the plants or central management of the company.

**Standard Metropolitan Statistical Areas**—Standard metropolitan statistical areas (SMSA) are integrated economic and social units with a large volume of daily travel and communication between the central city and outlying parts of the area.<sup>1</sup> Each area (except in New England) consists of one whole county or more. An area may contain not only highly industrialized counties but also adjoining counties which, though primarily residential in character, contribute significantly to the industrial counties' labor force and are socially and economically integrated with the central city. These areas are defined by the Federal Committee on Standard Metropolitan Statistical Areas of the Office of Management and Budget for general-purpose use throughout the Federal Government in presenting economic and social data. In the New England States, similar intergration criteria are applied in defining

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<sup>1</sup> Each standard metropolitan statistical area must include either (1) a city with 50,000 or more inhabitants, or (2) a city having a population of at least 25,000 which (a) with the addition of the population of contiguous places has a population density of at least 1,000 persons per square mile; (b) constitutes, for general economic and social purposes, a single community with a combined population of at least 50,000; and (c) includes a total population of at least 75,000 in the county or counties in which the city and contiguous places are located.

SMSA's on a city and town basis because towns rather than counties are regarded as the significant unit in this region of the country.

The requirement that each SMSA consist of county units (except in New England) sometimes results in the inclusion in an area of considerable amount of territory which would not ordinarily be considered "metropolitan," much less "industrial." It is recognized that metropolitan areas could be more accurately defined in terms of smaller area segments such as minor civil

divisions, but the usefulness of areas so defined would be limited by the fact that many types of economic and social data are available only on a county basis.

Each SMSA is designated by the name of the principal city of the area. In addition to the name of the principal city, the area title may include one or two additional city names.

The data for SMSA's which changed definition since the 1967 census have not been retabulated on the new basis for years prior to 1972.

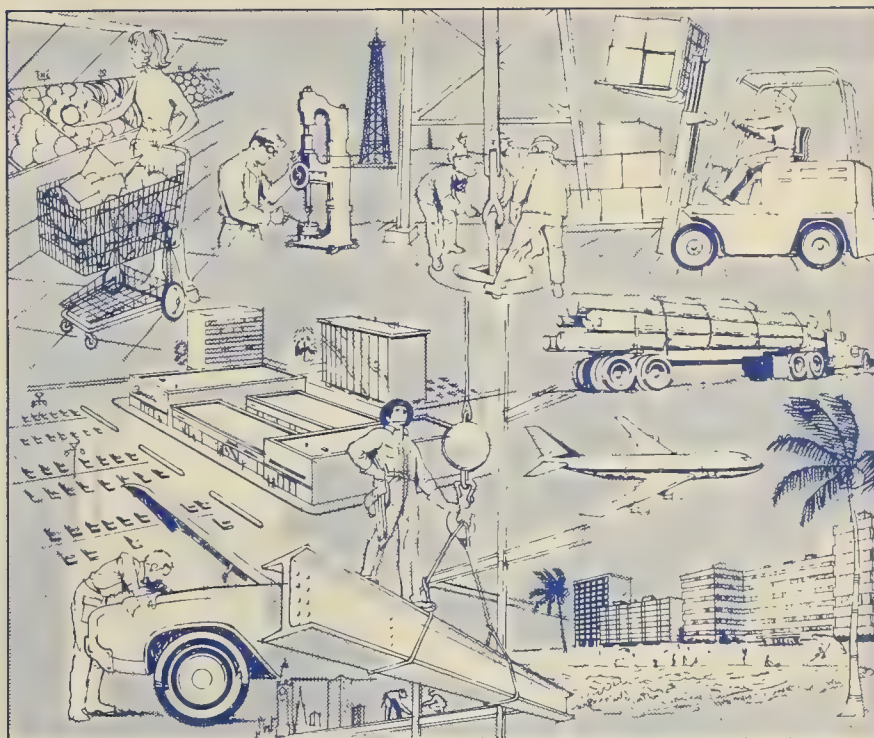


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# PRELIMINARY REPORT

# 1972 CENSUS OF MANUFACTURES

## AREA SERIES

IC72(P)-S48

U. S. DEPARTMENT OF COMMERCE • Social and Economic Statistics Administration • BUREAU OF THE CENSUS

Issued March 1974

## Washington

Value added by manufacturing in 1972 for the State of Washington amounted to \$4,571 million, an 11-percent increase from 1971 and a 21-percent increase from 1967.

This report presents preliminary results from the 1972 Census of Manufactures for the State, its Standard Metropolitan Statistical Areas (SMSA), and its counties.

Data are also provided for industry groups within the State. Historical data, back to 1958, are included for the State as a whole, and 1967 figures on employment and

value added are provided for the smaller areas.

The figures in this report have been subjected to only preliminary review and must be regarded as approximations of the final census figures. No adjustments have been made in the value figures for changes in price level.

For an explanation of the terms used in the tables, see the appendix at the end of this report.

TABLE 1. General Statistics for the State: 1972 and Earlier Years

(See appendix, Explanation of Terms)

Year	Establishments		All employees <sup>1</sup>		Production workers			Value added by manufacture	Cost of materials <sup>2</sup>	Value of shipments <sup>2</sup>	Capital expenditures, new
	Total	With 20 employees or more	Number	Payroll	Number	Man-hours	Wages				
	(number)	(number)	(1,000)	(million dollars)	(1,000)	(millions)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(million dollars)
WASHINGTON											
1972 Census .....	5,274	1,436	223.2	2,281.9	156.8	299.5	1,390.2	4,570.5	5,732.4	10,489.0	332.7
1971 ASM .....	(NA)	(NA)	220.7	2,061.8	148.2	276.5	1,205.6	4,117.0	5,560.8	10,731.0	364.5
1970 ASM .....	(NA)	(NA)	237.5	2,205.6	157.6	298.0	1,272.6	4,094.7	5,839.2	10,276.4	311.0
1969 ASM .....	(NA)	(NA)	272.8	2,445.2	177.7	339.7	1,330.8	5,132.8	5,504.5	10,618.2	306.1
1968 ASM .....	(NA)	(NA)	292.7	2,333.7	182.6	351.0	1,282.1	4,808.3	5,296.3	10,100.7	274.6
1967 Census .....	5,014	1,375	270.7	2,119.0	177.7	344.6	1,179.8	3,764.2	4,777.5	8,503.0	464.7
1966 ASM .....	(NA)	(NA)	251.6	1,931.8	171.4	332.4	1,109.6	3,289.2	4,309.3	7,696.1	418.2
1965 ASM .....	(NA)	(NA)	223.3	1,611.2	156.9	307.0	975.2	3,048.8	3,774.7	6,964.8	243.3
1964 ASM .....	(NA)	(NA)	231.0	1,584.9	156.5	309.0	945.0	3,175.7	3,348.1	6,773.9	177.4
1963 Census .....	5,250	1,233	224.4	1,479.1	152.2	297.3	881.4	2,884.9	(NA)	(NA)	143.4
1962 ASM .....	(NA)	(NA)	231.0	1,492.6	156.4	305.8	871.5	2,822.8	(NA)	(NA)	186.5
1961 ASM .....	(NA)	(NA)	215.5	1,335.3	146.4	280.7	777.7	2,463.9	(NA)	(NA)	141.1
1960 ASM .....	(NA)	(NA)	217.8	1,276.1	150.6	287.8	773.8	2,282.0	(NA)	(NA)	144.0
1959 ASM .....	(NA)	(NA)	229.0	1,283.2	161.7	313.1	808.6	2,343.4	(NA)	(NA)	116.0
1958 Census .....	5,065	1,157	215.0	1,173.3	157.3	305.9	761.4	2,166.6	(NA)	(NA)	160.4

Note: "ASM" data are based on a representative sample of manufacturing establishments canvassed in the Annual Survey of Manufactures. These estimates may differ from the results of a complete canvass of all manufacturing establishments. The standard errors associated with these estimates are published in the annual survey of manufactures volumes for this period. For comparative purposes, the 1972 ASM estimate for the State of Washington was 218 thousand employees, and \$4,484 million in value added with corresponding standard error of estimate of 2 and 2.

(NA) Not available.

<sup>1</sup>Includes employment and payroll at central administrative offices and auxiliary units. (For a definition of these units, see appendix.)

<sup>2</sup>The total cost of materials and value of shipments may include extensive duplication arising from shipments between establishments in the same industry classification. (For a more complete explanation, see appendix.)

TABLE 2. General Statistics for the State, Standard Metropolitan Statistical Areas, and Counties: 1972 and 1967

(See appendix, Explanation of Terms)

State, standard metropolitan statistical areas, and counties <sup>1</sup>	1972											1967	
	Establishments		All employees <sup>2</sup>		Production workers			Value added by manufac- ture	Cost of materials <sup>3</sup>	Value of shipments <sup>3</sup>	Capital expendi- tures, new	All employees	Value added by manufac- ture
	Total	With 20 employees or more	Number	Payroll	Number	Man-hours	Wages						
	(number)	(number)	(1,000)	(million dollars)	(1,000)	(million)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(1,000)	(million dollars)
WASHINGTON, TOTAL . . . . .	5 274	1 436	223.2	2 281.9	156.8	299.5	1 390.2	4 570.5	5 732.4	10 489.0	332.7	270.7	3 764.2
STANDARD METROPOLITAN STATISTICAL AREAS <sup>4</sup>													
PORTLAND . . . . .	1 964	638	843	783.7	61.4	116.3	505.7	1 572.0	1 873.1	3 425.0	91.2	79.8	1 115.4
PORTION IN WASHINGTON . . . . .	191	54	11.2	111.2	9.0	17.7	84.8	243.9	339.6	589.7	12.3	10.5	186.5
PORTION IN OREGON . . . . .	1 773	584	73.1	672.1	52.4	98.6	420.9	1 328.1	1 533.5	2 835.3	78.9	69.3	928.9
RICHLAND-KENNEWICK . . . . .	70	23	5.8	54.5	3.8	7.2	31.5	139.8	63.7	204.9	4.2	5.3	119.3
SEATTLE-EVERETT . . . . .	2 124	563	107.7	1 186.0	65.7	125.5	589.1	2 190.4	2 320.2	4 689.3	83.5	162.2	2 038.5
SPOKANE . . . . .	359	60	12.2	115.8	8.9	17.2	79.6	239.0	356.6	590.6	18.2	12.3	197.6
TACOMA . . . . .	504	161	20.1	202.7	14.4	27.1	126.0	360.7	573.8	932.6	34.7	19.8	282.6
YAKIMA . . . . .	178	74	6.6	56.1	5.3	10.4	41.8	133.3	237.2	369.4	7.2	7.1	91.4
COUNTIES													
BENTON . . . . .	47	18	4.4	47.5	2.6	5.1	25.9	120.3	44.5	166.2	3.5	4.8	113.6
CHELAN . . . . .	64	22	1.5	11.2	1.2	2.3	8.4	27.0	23.7	52.7	1.2	2.6	57.4
CLALLAM . . . . .	159	34	3.5	31.1	2.9	5.4	26.7	65.0	86.7	151.8	14.7	2.8	44.4
CLARK . . . . .	191	54	11.2	111.2	9.0	17.7	84.8	243.9	339.6	589.7	12.3	10.5	186.5
COWLITZ . . . . .	130	47	11.8	126.2	9.4	18.3	96.7	275.6	318.5	599.0	18.2	9.8	149.7
FERRY . . . . .	23	5	.4	3.0	.4	.7	2.8	5.5	7.9	13.2	1.3	.2	1.6
FRANKLIN . . . . .	23	5	1.4	7.0	1.2	2.1	5.6	19.5	19.2	38.7	.7	.5	5.7
GRANT . . . . .	40	8	2.5	22.7	2.1	4.3	18.0	78.9	109.3	201.8	18.3	1.6	17.7
GRAYS HARBOR . . . . .	248	54	7.6	74.9	6.6	12.7	63.0	147.3	182.5	330.3	16.9	7.9	109.9
JEFFERSON . . . . .	48	6	.9	9.0	.9	1.6	8.3	20.4	21.5	41.9	1.8	(D)	(D)
KING . . . . .	1 752	497	88.6	995.2	51.7	97.7	461.7	1 794.2	1 687.2	3 388.9	59.9	146.1	1 932.4
KITSAP . . . . .	60	8	.7	5.6	.5	.8	3.0	15.1	9.5	24.2	.9	.8	11.2
KITTITAS . . . . .	44	7	.7	5.6	.6	1.0	4.4	13.0	56.3	68.9	.5	.7	9.2
Klickitat . . . . .	48	6	1.1	9.2	1.0	1.8	8.1	18.5	24.1	41.9	1.2	1.3	11.8
LEWIS . . . . .	170	52	4.7	39.9	3.9	7.4	31.6	88.8	117.1	202.7	15.7	3.6	41.7
MASON . . . . .	66	10	2.1	21.9	1.6	3.0	15.1	32.9	50.6	82.9	1.7	(D)	(D)
PIERCE . . . . .	504	161	20.1	202.7	14.4	27.1	126.0	360.7	573.8	932.6	34.7	19.8	282.6
SKAGIT . . . . .	127	33	4.3	38.0	3.6	6.5	28.6	98.7	282.0	380.5	28.9	4.2	101.9
SKAMANIA . . . . .	16	6	.9	8.0	.9	1.6	7.4	12.7	13.7	26.5	1.0	.9	7.7
SNOHOMISH . . . . .	372	96	19.1	190.8	14.0	27.8	127.4	305.0	642.0	1 300.4	23.6	16.1	106.1
SPOKANE . . . . .	359	99	12.2	115.8	8.9	17.2	79.6	239.0	356.6	590.6	18.2	12.3	197.6
STEVENS . . . . .	53	8	.9	6.6	.8	1.6	5.8	17.2	16.9	34.0	.8	.8	9.1
THURSTON . . . . .	94	19	2.5	23.9	1.9	3.7	17.2	65.3	105.3	170.0	4.6	2.6	56.0
WAKIACUM . . . . .	18	3	.4	4.3	.4	.7	3.6	6.2	15.5	22.2	1.9	(D)	(D)
WALLA WALLA . . . . .	44	16	1.9	15.6	1.5	2.9	11.6	48.0	47.2	95.0	3.8	1.8	28.8
WHATCOM . . . . .	143	37	4.6	45.4	3.5	7.0	32.7	105.3	223.6	327.4	27.3	4.5	107.5
YAKIMA . . . . .	178	74	6.6	56.1	5.3	10.4	41.8	133.3	237.2	369.4	7.2	7.1	91.4

(D) Withheld to avoid disclosing figures for individual companies.

<sup>1</sup>Some counties were withheld from publication in order to (a) avoid disclosing figures for individual companies or (b) permit further checking of the figures for smaller counties. Additional detail will appear in the final report for this State.<sup>2</sup>Includes employment and payroll at central administrative offices and auxiliary units. (For a definition of these units, see appendix.)<sup>3</sup>The total cost of materials and value of shipments may include extensive duplication arising from shipments between establishments in the same industry classification. (For a more complete explanation, see appendix.)<sup>4</sup>The standard metropolitan statistical areas in this State are defined as follows:

PORTLAND, OR-WA, SMSA: Consists of Clackamas, Multnomah, and Washington Counties, OR, and Clark County, WA.

RICHLAND-KENNEWICK SMSA: Consists of Benton and Franklin Counties, WA.

SEATTLE-EVERETT SMSA: Consists of King and Snohomish Counties, WA.

SPOKANE SMSA: Coextensive with Spokane County, WA.

TACOMA SMSA: Coextensive with Pierce County, WA.

YAKIMA SMSA: Coextensive with Yakima County, WA.



TABLE 3. General Statistics for the State, by Industry Groups and Industries: 1972 and 1967

(See appendix, Explanation of Terms)

Code	Industry	1972											1967	
		Establishments		All employees		Production workers			Value added by manufacture	Cost of materials <sup>1</sup>	Value of shipments <sup>1</sup>	Capital expenditures, new	All employees	Value added by manufacture
		Total	With 20 employees or more	Number	Payroll	Number	Man-hours	Wages						
		(number)	(number)	(1,000)	(million dollars)	(1,000)	(million)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(1,000)	(million dollars)
	ALL INDUSTRIES, TOTAL . . . . .	5 274	1 436	223.2	2 281.9	156.8	299.5	1 390.2	4 570.5	5 732.4	10 489.0	332.7	270.7	3 764.2
20	FOOD AND KINDRED PRODUCTS . . . . .	527	227	25.5	214.8	19.0	35.8	140.7	540.6	1 150.8	1 686.4	42.1	28.4	444.3
201	MEAT PRODUCTS . . . . .	58	23	2.7	25.1	2.1	3.9	18.4	55.6	291.4	345.6	1.7	4.0	48.9
2011	MEATPACKING PLANTS . . . . .	42	14	1.8	19.9	1.4	2.8	14.4	45.3	262.0	305.8	1.2	2.7	39.6
202	DAIRY PRODUCTS . . . . .	59	32	2.6	28.2	1.2	2.4	12.3	55.1	187.6	244.2	3.5	3.7	58.8
203	PRESERVED FRUITS AND VEGETABLES . . . . .	100	62	8.5	55.8	7.5	14.5	44.5	161.9	202.0	367.2	10.0	(NA)	(NA)
2034	DEHYDRATED FRUITS, VEGETABLES, SOUPS . . . . .	13	8	.6	3.9	.5	.9	2.7	14.5	17.2	33.5	.6	.6	9.4
2037	FROZEN FRUITS AND VEGETABLES . . . . .	32	28	5.0	31.3	4.5	8.6	25.3	79.4	94.2	175.0	6.5	(NA)	(NA)
204	GRAIN MILL PRODUCTS . . . . .	55	10	1.3	13.3	1.0	1.9	8.8	46.8	117.8	162.2	1.8	1.5	25.5
205	BAKERY PRODUCTS . . . . .	41	13	2.5	25.6	1.4	2.6	13.0	41.9	32.2	74.0	2.2	3.0	42.5
206	SUGAR AND CONFECTIONERY PRODUCTS . . . . .	17	7	1.4	10.6	1.3	2.3	8.7	23.2	69.4	88.3	(D)	(NA)	(NA)
208	BEVERAGES . . . . .	52	29	3.0	33.8	1.7	3.2	18.6	98.5	136.9	235.1	5.7	2.9	86.0
209	MISC. FOODS AND KINDRED PRODUCTS . . . . .	133	46	3.3	20.7	2.8	4.7	15.3	50.3	102.2	152.4	(D)	(NA)	(NA)
2092	FRESH OR FROZEN PACKAGED FISH . . . . .	41	24	1.4	8.5	1.2	2.0	6.8	15.0	52.1	67.1	2.2	CC	(D)
22	TEXTILE MILL PRODUCTS . . . . .	17	5	.6	3.8	.6	1.0	3.0	9.9	5.6	15.4	.1	CC	(D)
23	APPAREL, OTHER TEXTILE PRODUCTS . . . . .	147	54	6.3	33.2	5.4	9.5	22.8	64.0	71.1	129.8	2.2	5.1	37.7
232	MEN'S AND BOYS' FURNISHINGS . . . . .	27	22	3.7	19.3	3.2	5.8	13.6	36.7	46.5	80.9	1.0	2.3	18.3
2329	MEN'S AND BOYS' CLOTHING, NEC. . . . .	20	17	2.0	10.6	1.8	3.2	7.8	21.2	17.9	37.0	(D)	1.2	9.8
233	WOMEN'S, AND MISSES' OUTERWEAR . . . . .	27	12	.9	4.3	.8	1.3	3.2	7.1	4.6	11.1	(D)	1.5	9.5
239	MISC. FABRICATED TEXTILE PRODUCTS . . . . .	73	11	.9	4.9	.8	1.4	3.6	8.7	9.9	18.5	.3	.9	7.9
2391	CURTAINS AND DRAPERIES . . . . .	33	5	.3	1.3	.2	.4	1.0	1.9	1.8	3.6	(D)	.2	1.2
24	LUMBER AND WOOD PRODUCTS . . . . .	1 692	376	47.6	423.7	42.4	80.3	364.8	934.9	1 078.5	2 010.3	79.3	(NA)	(NA)
243	MILLWORK, PLYWOOD, STRUC. MEMBERS . . . . .	216	83	12.1	114.4	10.7	21.2	97.1	219.6	290.4	511.0	9.2	(NA)	(NA)
2434	WOOD KITCHEN CABINETS . . . . .	51	9	.8	6.1	.6	1.1	4.7	9.7	6.7	16.2	.3	(NA)	(NA)
2435	HARDWOOD VENEER AND PLYWOOD . . . . .	14	8	.9	7.9	.7	1.4	6.4	18.9	31.8	50.0	.8	(NA)	(NA)
2451	MORILE HOMES . . . . .	9	5	.8	5.8	.7	1.2	4.4	9.9	20.1	29.9	.3	(NA)	(NA)
249	MISCELLANEOUS WOOD PRODUCTS . . . . .	64	18	1.2	9.3	1.0	1.8	7.1	14.9	25.5	40.1	.9	(NA)	(NA)
2491	WOOD PRESERVING . . . . .	17	10	.6	5.0	.4	.8	3.8	6.7	17.5	24.0	.3	.6	8.0
2499	WOOD PRODUCTS, NEC . . . . .	47	8	.7	4.3	.5	1.0	3.3	8.2	8.0	16.1	.5	(NA)	(NA)
25	FURNITURE AND FIXTURES . . . . .	118	34	3.0	22.8	2.5	4.5	16.9	37.8	31.9	68.9	1.5	2.8	28.5
251	HOUSEHOLD FURNITURE . . . . .	64	22	2.1	14.3	1.8	3.2	11.2	21.9	21.9	43.1	1.1	(NA)	(NA)
2515	MATTRESSES AND BEDSPRINGS . . . . .	17	6	.3	2.6	.2	.4	1.7	5.8	6.6	12.3	.2	.3	4.1
2531	PUBLIC BUILDING, RELATED FURNITURE . . . . .	10	4	.5	4.4	.3	.6	2.7	8.7	5.2	14.0	.2	BB	(D)
26	PAPER AND ALLIED PRODUCTS . . . . .	86	63	17.3	201.0	13.9	27.9	156.6	436.6	549.7	991.7	65.3	18.9	377.7
2621	PAPERMILLS, EXCEPT BUILDING PAPER . . . . .	13	12	6.4	78.6	5.3	10.5	63.5	162.1	183.6	348.7	25.1	7.4	153.1
2631	PAPERBOARD MILLS . . . . .	6	6	3.7	43.2	2.8	5.6	31.9	96.2	123.2	220.4	16.2	EE	(D)
264	MISC. CONVERTED PAPER PRODUCTS . . . . .	28	14	2.6	27.0	2.2	4.3	22.1	68.0	101.8	170.0	2.2	FF	(D)
27	PRINTING AND PUBLISHING . . . . .	546	80	10.8	98.4	6.1	10.1	54.2	179.5	67.6	245.9	11.6	9.8	120.3
2711	NEWSPAPERS . . . . .	157	37	6.5	61.8	3.0	4.8	29.8	110.2	33.2	143.4	9.3	5.8	73.5
273	BOOKS . . . . .	13	3	.5	2.0	.4	.4	1.3	6.0	1.9	7.7	(D)	(NA)	(NA)
275	COMMERCIAL PRINTING . . . . .	288	27	2.8	25.2	2.0	3.7	17.7	44.7	25.2	69.1	1.4	(NA)	(NA)
2761	MANIFOLD BUSINESS FORMS . . . . .	8	4	.3	2.6	.2	.4	1.7	4.0	3.2	7.1	.3	.2	2.9
278	BLANKBOOKS AND BOOKBINDING . . . . .	10	3	.3	2.5	.2	.4	1.5	5.7	.7	6.4	.3	.3	2.7
28	CHEMICALS AND ALLIED PRODUCTS . . . . .	122	39	5.5	61.4	3.2	6.2	32.8	179.3	85.4	264.7	6.5	6.4	166.0
281	INDUSTRIAL INORGANIC CHEMICALS . . . . .	17	8	.8	7.1	.5	.9	4.8	38.2	19.7	58.0	(D)	(NA)	(NA)
2851	PLANTS AND ALLIED PRODUCTS . . . . .	25	11	.6	5.5	.3	.5	2.2	12.2	15.3	28.3	1.0	.6	12.1
287	AGRICULTURAL CHEMICALS . . . . .	17	4	.3	2.3	.2	.3	1.3	10.4	11.4	21.5	2.3	(NA)	(NA)
289	MISCELLANEOUS CHEMICAL PRODUCTS . . . . .	27	6	.5	5.7	.4	.8	3.7	12.7	20.7	31.3	.8	(NA)	(NA)
29	PETROLEUM AND COAL PRODUCTS . . . . .	27	12	1.5	19.2	1.0	2.0	11.8	91.8	328.4	418.6	39.4	EE	(D)
30	RUBBER AND MISC. PLASTICS PROD . . . . .	108	35	2.0	15.4	1.6	2.9	10.8	30.9	31.0	60.7	2.9	(NA)	(NA)
3079	MISCELLANEOUS PLASTICS PRODUCTS . . . . .	101	30	1.7	13.5	1.4	2.6	9.5	27.8	27.7	54.3	(D)	(NA)	(NA)
31	LEATHER AND LEATHER PRODUCTS . . . . .	13	3	.3	1.9	.3	.5	1.3	4.4	2.0	6.3	.1	BB	(D)
32	STONE, CLAY, AND GLASS PRODUCTS . . . . .	242	59	5.4	54.7	4.0	7.8	37.4	112.3	93.5	204.7	6.9	5.9	91.7
3241	CEMENT, HYDRAULIC . . . . .	5	4	.4	5.0	.3	.6	3.6	17.7	14.7	32.3	.6	.5	9.7
325	STRUCTURAL CLAY PRODUCTS . . . . .	11	6	.3	2.0	.2	.5	1.6	5.2	2.5	7.8	.2	.2	3.0
327	CONCRETE, GYPSUM, PLASTER PRODUCTS . . . . .	166	44	3.4	35.8	2.4	4.6	23.0	63.3	62.6	124.5	5.1	4.2	63.6
3272	CONCRETE PRODUCTS, NEC . . . . .	74	13	1.5	16.3	1.2	2.4	11.7	29.0	24.1	51.9	1.9	1.4	18.0
3273	READY-MIXED CONCRETE . . . . .	82	27	1.6	17.0	1.0	1.9	9.4	28.3	31.8	60.0	2.9	2.4	40.1
329	MISC. NONMETALLIC MINERAL PRODUCTS . . . . .	32	4	.5	4.5	.4	.8	3.2	9.1	6.9	16.2	.6	(NA)	(NA)

See footnotes at end of table.

TABLE 3. General Statistics for the State, by Industry Groups and Industries: 1972 and 1967—Continued

(See appendix, Explanation of Terms)

Code	Industry	1972										1967		
		Establishments		All employees		Production workers			Value added by manufacture	Cost of materials <sup>1</sup>	Value of shipments <sup>1</sup>	Capital expenditures, mmv	All employees	Value added by manufacture
		Total	With 20 employees or more	Number	Payroll	Number	Man-hours	Wages						
		(number)	(number)	(1,000)	(million dollars)	(1,000)	(million)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(1,000)	(million dollars)
33	PRIMARY METAL INDUSTRIES . . . . .	82	46	12.5	140.0	10.1	20.0	107.8	346.1	621.2	984.7	28.6	13.1	297.7
331	BLAST FURNACE, BASIC STEEL PROD. . .	10	6	1.8	19.6	1.4	2.5	14.0	41.9	31.6	72.6	(D)	2.3	35.6
3312	BLAST FURNACES AND STEEL MILLS . . .	4	3	1.6	17.6	1.2	2.3	12.6	37.5	25.8	62.8	(D)	EE	(D)
332	IRON AND STEEL FOUNDRIES . . . . .	26	14	1.3	11.9	1.1	2.1	9.5	18.0	10.0	27.7	.8	1.6	18.3
3321	GRAY IRON FOUNDRIES. . . . .	11	3	.4	2.9	.3	.5	2.4	4.2	2.6	6.7	.2	.7	6.8
3325	STEEL FOUNDRIES, NEC . . . . .	15	11	.9	9.0	.8	1.6	7.2	13.9	7.4	21.1	.6	(NA)	(NA)
333	PRIMARY NONFERROUS METALS. . . . .	11	9	5.6	64.1	4.5	9.0	49.9	221.0	382.7	617.2	13.7	5.3	186.4
336	NONFERROUS FOUNDRIES . . . . .	14	4	.3	2.7	.3	.5	2.2	4.3	3.6	7.9	.3	.3	3.0
34	FABRICATED METAL PRODUCTS. . . . .	339	95	7.4	75.9	5.5	10.7	52.4	144.3	151.8	296.5	13.5	(NA)	(NA)
3441	FABRICATED STRUCTURAL METAL PRODUCTS	45	23	1.8	20.9	1.3	2.4	13.5	34.0	34.5	68.8	(D)	2.1	30.5
3442	METAL DOORS, SASH, AND TRIM. . . . .	34	8	.8	7.2	.5	1.1	4.4	13.2	10.8	23.5	.3	1.1	12.4
3444	SHEET METALWORK. . . . .	46	10	.8	8.0	.6	1.1	5.4	14.7	16.1	30.9	.5	.7	9.8
347	METAL SERVICES, NEC. . . . .	42	6	.4	4.2	.3	.7	3.0	7.5	2.3	9.8	.4	.4	4.9
3471	PLATING AND POLISHING. . . . .	26	5	.4	3.6	.3	.5	2.5	6.4	1.8	8.3	.2	.3	3.1
35	MACHINERY, EXCEPT ELECTRICAL. . .	459	97	9.8	101.4	7.2	14.2	68.4	159.0	131.9	290.1	5.1	9.0	123.9
352	FARM AND GARDEN MACHINERY. . . . .	27	7	.4	3.1	.3	.6	2.1	5.2	7.4	12.6	.1	(NA)	(NA)
354	METALWORKING MACHINERY . . . . .	30	6	.6	6.6	.4	1.0	4.8	9.9	4.9	14.8	.4	.6	10.2
357	OFFICE AND COMPUTING MACHINES. . . .	11	7	.5	3.5	.4	.6	2.1	7.7	4.0	11.3	.2	.2	2.8
359	MISC. MACHINERY, EXCEPT ELECTRICAL	253	33	2.1	19.2	1.7	3.1	14.3	31.3	16.2	47.0	1.6	(NA)	(NA)
36	ELECTRIC, ELECTRONIC EQUIPMENT . .	121	30	3.8	35.6	2.5	5.0	19.1	69.1	56.3	120.1	4.2	(NA)	(NA)
366	COMMUNICATION EQUIPMENT. . . . .	30	11	2.2	21.5	1.3	2.8	10.5	39.0	32.9	67.1	(D)	FF	(D)
37	TRANSPORTATION EQUIPMENT . . . . .	233	74	51.1	641.4	27.2	53.4	260.4	1 125.1	1 216.1	2 532.1	20.0	(NA)	(NA)
3732	BOAT BUILDING AND REPAIRING. . . . .	96	17	2.4	18.2	2.1	4.3	14.7	29.6	44.2	72.2	4.0	EE	(D)
379	MISC. TRANSPORTATION EQUIPMENT . .	25	5	.6	4.4	.5	.7	2.9	8.0	14.2	21.9	.3	(NA)	(NA)
38	INSTRUMENTS AND RELATED PRODUCTS	63	20	2.2	19.0	1.4	2.8	9.3	47.1	16.6	63.4	1.1	(NA)	(NA)
384	MEDICAL INSTRUMENTS AND SUPPLIES .	20	5	.9	6.1	.7	1.4	4.4	19.4	5.7	26.3	.4	EE	(D)
39	MISC. MANUFACTURING INDUSTRIES . .	215	38	2.8	21.3	2.2	4.0	14.3	44.2	29.8	72.1	2.1	1.8	18.7
394	TOYS AND SPORTING GOODS. . . . .	54	11	1.2	7.3	.9	1.7	4.9	19.2	13.3	30.5	(D)	.5	4.5
3949	SPORTING AND ATHLETIC GOODS, NEC . .	48	11	1.2	7.2	.9	1.6	4.9	19.1	13.2	30.2	(D)	.4	4.2
399	MISCELLANEOUS MANUFACTURES . . . .	116	19	1.2	10.4	.9	1.6	6.8	19.1	10.8	30.0	.8	.8	10.1
3993	SIGNS AND ADVERTISING DISPLAYS . . .	62	13	.7	7.1	.5	.9	4.3	11.1	4.6	15.8	.6	.6	7.1
--	ADMINISTRATIVE AND AUXILIARY . . .	115	47	7.1	90.7	-	-	-	-	-	-	-	4.1	-

Note: The following symbols indicate employment size range for 1967:

AA less than 250 employees      EE 1,000 to 2,499 employees  
 BB 250 to 499 employees      FF 2,500 employees and over  
 CC 500 to 999 employees

- Represents zero. (NA) Not available. Because of a revision to this industry group in the 1972 edition of the SIC manual, 1967 census data are not available on a comparable basis. (D) Withheld to avoid disclosing figures for individual companies.

<sup>1</sup>The total cost of materials and value of shipments for industry groups shown may include extensive duplication arising from shipments between establishments in the same industry classification. (For a more complete explanation, see appendix.)

<sup>2</sup>Includes figures for industry groups which have been withheld from publication in order to (a) avoid disclosing figures for individual companies or (b) permit further checking of figures for smaller industry groups. Additional detail will appear in the final report for this State.



## Appendix A. SCOPE AND COVERAGE

This report is one of a series presenting preliminary information, by State, from the 1972 Census of Manufactures. The data will be superseded in a final report which, in turn, will be included in *Volume III, Area Statistics, 1972 Census of Manufactures*. The final report will include a comprehensive discussion of the concepts and definitions used in the census.

The census of manufactures covers each manufacturing establishment in the United States with one paid employee or more; manufacturing establishments with no employees are excluded. Firms which operated more than one establishment were required to file a separate report for each location. Companies which engaged in distinctly different lines of activity at one location were asked to submit separate reports if the company records permitted such a separation and the activities were of significant size.

This report includes figures for administrative offices, warehouses, garages, or other auxiliary units which service manufacturing establishments.

In the 1972 census, the approximately 120,000 manufacturing establishments with fewer than 10 employees were excused from filing reports. Under special arrangements which safeguarded the confidentiality of both tax and census records, data on payrolls, sales, and industry classification from the administrative records of the Social Security Administration and the Internal Revenue Service were made available to the Census Bureau for use in the 1972 Economic Censuses (retail and wholesale trade, service industries, construction industries, manufactures, and mineral industries). Estimates for data other than payrolls and sales for these small establishments were constructed from industry averages. The effect on industry aggregates is slight in most industries. For manufacturing as a whole, these small establishments account for less than 3 percent of the payrolls and value added.

Establishments are classified by industry in accordance with industry definitions described in the 1972 edition of the Standard Industrial Classification (SIC) Manual. For 1972, the SIC was significantly revised and the comparability with prior year's data for some industries was significantly affected. The comparability at the 2- and 3-digit SIC levels was less affected. The final volumes of the 1972 Census of Manufactures will contain a table relating aggregates based on the 1972 SIC with aggregates derived from classifying establishments according to the 1967 SIC definitions.

As in earlier censuses, a number of small establishments may have been misclassified as to industry. However, such possible misclassifications have significant effect on *none* of the statistics except the number of establishments. As indicated above, report forms were not mailed to very small establishments (fewer than 10 employees). The industry classifications for these establishments were assigned on the basis of brief descriptions of the general activity of the establishment. Where the description is incomplete or there are relatively fine lines of demarcation among industries or between manufacturing and nonmanufacturing activity, the code assigned to an establishment could differ from that which would have been assigned on the basis of more complete product information. Therefore, the total establishment count for individual industries should be viewed as an approximation rather than a precise measurement. The counts for establishments with 20 employees or more are more reliable than the total number of establishments.

More detailed figures for this State will appear in the final census reports. Final reports will also include a comprehensive discussion of such concepts as "industry" and "establishment," as well as the various statistical items such as "employment," "value of shipments," and "value added." Similar preliminary and final reports will be issued for other States during the coming months. A series of preliminary summary reports showing U.S. totals for each manufacturing industry and for each State are being issued. Final industry reports and final area reports will be published during 1974.

Order forms describing the individual reports and listing their prices may be obtained from any U.S. Department of Commerce district office or from the Publications Distribution Section, Social and Economic Statistics Administration, Washington, D.C. 20233.

The 1972 Census of Manufactures is the 29th census of manufacturing establishments in the United States. For 1972, it was conducted jointly with the censuses of mineral industries, construction industries, retail trade, wholesale trade, and selected services under authority of Title 13 of the United States Code. Title 13 specifies that a census of manufactures be conducted every 5 years and, as amended, to cover years ending in "2" and "7". Title 13 also authorizes an annual sample survey of manufacturing establishments in interim years.



## Appendix B. EXPLANATION OF TERMS

*(For a more complete discussion of these terms and the method of compiling the Census of Manufactures, see the "Introduction" to the 1967 Census of Manufactures, Volume III).*

**All Employees**—All full-time and part-time employees on the payrolls of operating manufacturing establishments for any part of the pay period ending nearest the 12th of the months specified on the report form. Included are all persons on paid sick leave, paid holidays, and paid vacations during these pay periods. Officers of corporations are included as employees; proprietors and partners of unincorporated firms are excluded. The "all employee" number is the average number of production workers for the midmonth payroll period of March, May, August, and November plus the number of nonproduction employees in mid-March.

**Number of Production Workers**—Workers (up through the working foreman level) engaged in fabricating, processing, assembling, inspecting, receiving, packing, warehousing, shipping (but not delivering), and maintenance, repair, janitorial, and watchman services, product development, auxiliary production for plant's own use (e.g., powerplant), recordkeeping, and other closely associated services. Proprietors and partners are excluded.

**Payroll**—This item includes all forms of compensation such as salaries, wages, commissions, dismissal pay, bonuses, vacation and sick leave pay, and compensation in kind, prior to such deductions as employees' Social Security contributions, withholding taxes, group insurance, union dues, and savings bonds. The total includes salaries of officers of these establishments, if a corporation; it excludes payments to the proprietor or partners, if an unincorporated concern. Respondents were told that in reporting they could follow the definition of payrolls used for calculating the Federal withholding tax.

**Man-Hours of Production Workers**—This total relates to production-worker man-hours worked or paid for at the plant including actual overtime hours (not straight-time equivalent hours). It excludes hours paid for vacation, holidays, or sick leave when the employee was not at the plant.

**Cost of Materials**—The term "Cost of Materials" refers to charges actually paid or payable for items consumed or put into production during the year, including freight and other direct charges incurred by the establishment in acquiring these materials. It includes the cost of materials or fuel consumed regardless of

whether these items were purchased by the establishment from other companies, transferred to it from other establishments of the same company, or withdrawn from inventory during the year. The establishment was requested to value materials transferred from other parts of the company at its approximate market value, not at cost of production. The important components of this cost item are (a) all raw materials, semifinished goods, parts, components, containers, scrap, and supplies put into production or used as operating supplies and for repair and maintenance during the year; (b) electric energy purchased; (c) fuels consumed for heat, power, or the generation of electricity; (d) work done by others on materials or parts furnished by manufacturing establishments (contract work); and (e) products bought and resold in the same condition.

**Value of Shipments**—The value of shipments is the received or receivable net selling value, f.o.b. plant (exclusive of freight and taxes), of all products shipped, both primary and secondary, as well as all miscellaneous receipts such as receipts for contract work performed for others, installation and repair, sales of scrap, and sale of products bought and resold without further processing. Included are all items made by the establishment or for it under contract from materials owned by it whether sold, transferred to other plants of the same company, or shipped on consignment. The net selling value of products made in one plant on a contract basis from materials owned by another was reported by the plant providing the materials.

In the case of multiunit companies, the manufacturer was requested to report the value of products transferred to other establishments of the same company at full economic value; i.e., to include not only the direct costs of production but also a reasonable proportion of "all other costs" (including company overhead) and profit.

**Duplication in Cost of Materials and Value of Products**—The aggregate cost of materials and value-of-shipments figures for industry groups and for all manufacturing industries may include large amounts of duplication since the products of some industries are used as materials by others. With some important exceptions, such as motor vehicles and parts, this duplication is not significant within individual industries but arises from the addition of the totals of related industries in successive stages of the production of a finished manufactured product. Examples are the addition of flour mills to bakeries in the food group and the addition of pulp mills to paper mills in the paper and allied products group of industries. Esti-



mates of this duplication indicate that the value of manufactured products exclusive of such duplication—the value of finished manufactures—approximates two-thirds of the total value of products.

Prior to 1962, the Bureau of the Census did not publish figures for cost of materials or value of shipments if they contained significant duplication. Effective with the 1962 annual survey these figures were shown at all industry levels for the United States to meet the requests for their use in studies in which the presence of an indeterminate amount of duplication is not a limiting factor. However, they are appropriately footnoted. Effective with the 1964 annual survey, these industry group totals are also shown at the State, standard metropolitan statistical area, and large-county level.

Even where there is no significant amount of duplication, value-of-shipments figures are deficient as measures of the relative economic importance of individual manufacturing industries or geographic areas because of the wide variation in ratio of materials, labor, and other processing costs to value of shipments among industries.

**Value Added by Manufacture**—This measure of manufacturing activity is derived by subtracting the cost of materials, supplies, containers, fuel, purchased electricity, and cost of resales contract work from the value of shipments for products manufactured plus resales and receipts for services rendered. The result of this calculation is adjusted by the net change in finished goods and work-in-process inventories between the beginning and end of the year. (In the few industries that report value of production rather than value of shipments, only changes in work-in-process inventories are used to adjust value added. In the shipbuilding and repairing industry, no inventory adjustment is made.)

“Value added” avoids the duplication in the value of shipments figure which results from the use of products of some establishments as materials by others. Value added is considered to be the best value measure available for comparing the relative economic importance of manufacturing among industries and geographic areas.

**Expenditures for Plant and Equipment**—Manufacturing establishments in operation and establishments under construction but not yet in operation, were asked to report their expenditures for (a) permanent additions and major alterations to the manufacturing establishment, and (b) new machinery and equipment used for replacement purposes and additions to plant capacity if they are of the type for which depreciation accounts are ordinarily maintained.

These totals exclude expenditures for new facilities and equipment leased from nonmanufacturing concerns; new facilities owned by the Federal Government but operated under contract by private companies; and plant and equipment furnished to the manufacturer by communities and nonprofit organizations. Expenditures for used plant and equipment (although reported in the census), expenditures for land, and cost of maintenance and repairs charged as current operating expense are also omitted from the figures for new capital expenditures.

**Central Administrative Offices and Auxiliary Units**—In the 1972 census as in previous years, respondents were asked to file separate reports for central administrative offices or auxiliary units which were (1) at different locations from the establishments served or, (2) at the same location as one of these establishments but were not operated as an integral part thereof and served two or more establishments. The functions of employees in central administrative offices include general company policy determination, planning and management (that is, company purchasing, accounting, general engineering, direction of company personnel matters, and legal and patent matters). Auxiliaries are storage facilities, garages, repair shops, purchasing offices, sales promotion offices, and research laboratories serving the plants or central management of the company.

**Standard Metropolitan Statistical Areas**—Standard metropolitan statistical areas (SMSA) are integrated economic and social units with a large volume of daily travel and communication between the central city and outlying parts of the area.<sup>1</sup> Each area (except in New England) consists of one whole county or more. An area may contain not only highly industrialized counties but also adjoining counties which, though primarily residential in character, contribute significantly to the industrial counties' labor force and are socially and economically integrated with the central city. These areas are defined by the Federal Committee on Standard Metropolitan Statistical Areas of the Office of Management and Budget for general-purpose use throughout the Federal Government in presenting economic and social data. In the New England States, similar intergration criteria are applied in defining

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<sup>1</sup> Each standard metropolitan statistical area must include either (1) a city with 50,000 or more inhabitants, or (2) a city having a population of at least 25,000 which (a) with the addition of the population of contiguous places has a population density of at least 1,000 persons per square mile; (b) constitutes, for general economic and social purposes, a single community with a combined population of at least 50,000; and (c) includes a total population of at least 75,000 in the county or counties in which the city and contiguous places are located.

SMSA's on a city and town basis because towns rather than counties are regarded as the significant unit in this region of the country.

The requirement that each SMSA consist of county units (except in New England) sometimes results in the inclusion in an area of considerable amount of territory which would not ordinarily be considered "metropolitan," much less "industrial." It is recognized that metropolitan areas could be more accurately defined in terms of smaller area segments such as minor civil

divisions, but the usefulness of areas so defined would be limited by the fact that many types of economic and social data are available only on a county basis.

Each SMSA is designated by the name of the principal city of the area. In addition to the name of the principal city, the area title may include one or two additional city names.

The data for SMSA's which changed definition since the 1967 census have not been retabulated on the new basis for years prior to 1972.







PRELIMINARY REPORT  
**1972 CENSUS OF  
MANUFACTURES**  
AREA SERIES

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U. S. DEPARTMENT OF COMMERCE • Social and Economic Statistics Administration • BUREAU OF THE CENSUS

Issued March 1974

## West Virginia

Value added by manufacturing in 1972 in the State of West Virginia amounted to \$2,633 million, a 10-percent increase from 1971 and a 21-percent increase from 1967.

This report presents preliminary results from the 1972 Census of Manufactures for the State, its Standard Metropolitan Statistical Areas, and its counties.

Data are provided for industry groups within the State. Historical data, back to 1958, are included for the State as a whole,

and 1967 figures on employment and value added are provided for the smaller areas.

The figures in this report have been subjected to only preliminary review and must be regarded as approximations of the final census figures. No adjustments have been made in the value figures for changes in price level.

For an explanation of the terms used in the tables, see the appendix at the end of this report.

TABLE 1. General Statistics for the State: 1972 and Earlier Years

(See appendix, Explanation of Terms)

Year	Establishments		All employees <sup>1</sup>		Production workers			Value added by manufacture	Cost of materials <sup>2</sup>	Value of shipments <sup>2</sup>	Capital expenditures, new
	Total	With 20 employees or more	Number	Payroll	Number	Man-hours	Wages				
	(number)	(number)	(1,000)	(million dollars)	(1,000)	(millions)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(million dollars)
WEST VIRGINIA											
1972 Census .....	1,728	600	118.9	1,075.7	92.1	181.3	762.2	2,632.7	2,379.4	4,995.1	215.7
1971 ASM .....	(NA)	(NA)	118.3	1,017.7	89.4	175.1	701.4	2,387.7	2,188.6	4,561.5	241.3
1970 ASM .....	(NA)	(NA)	122.4	989.3	92.2	183.0	674.7	2,317.5	2,164.3	4,470.8	251.9
1969 ASM .....	(NA)	(NA)	128.1	953.1	98.4	194.7	668.4	2,288.9	2,080.8	4,331.8	198.0
1968 ASM .....	(NA)	(NA)	123.3	878.2	95.4	190.3	621.2	2,220.4	2,031.7	4,264.3	210.6
1967 Census .....	1,844	563	124.0	831.6	96.7	189.9	587.3	2,169.5	1,899.8	4,046.5	269.0
1966 ASM .....	(NA)	(NA)	124.6	806.5	97.4	194.8	574.3	2,146.9	1,855.3	3,982.9	249.3
1965 ASM .....	(NA)	(NA)	120.9	759.5	94.2	188.1	540.9	2,060.3	1,699.7	3,732.0	198.6
1964 ASM .....	(NA)	(NA)	119.2	737.0	90.7	182.6	516.6	1,875.6	1,606.9	3,483.9	180.3
1963 Census .....	1,832	528	117.0	700.1	90.2	179.8	491.3	1,886.4	(NA)	(NA)	173.0
1962 ASM .....	(NA)	(NA)	110.8	638.3	86.6	168.3	463.9	1,689.5	(NA)	(NA)	167.6
1961 ASM .....	(NA)	(NA)	109.5	607.5	85.4	165.0	438.9	1,441.8	(NA)	(NA)	113.8
1960 ASM .....	(NA)	(NA)	115.2	617.7	90.3	180.4	450.0	1,434.8	(NA)	(NA)	126.3
1959 ASM .....	(NA)	(NA)	119.7	619.0	94.9	183.2	457.0	1,512.6	(NA)	(NA)	103.5
1958 Census .....	1,916	519	116.2	573.8	90.4	173.1	411.0	1,268.8	(NA)	(NA)	171.9

Note: "ASM" data are based on a representative sample of manufacturing establishments canvassed in the Annual Survey of Manufactures. These estimates may differ from the results of a complete canvass of all manufacturing establishments. The standard errors associated with these estimates are published in the annual survey of manufactures volumes for this period. For comparative purposes, the 1972 ASM estimate for the State of West Virginia was 115 thousand employees, and \$2,585 million in value added with corresponding standard error of estimate of 2 and 1.

(NA) Not available.

<sup>1</sup>Includes employment and payroll at central administrative offices and auxiliary units. (For a definition of these units, see appendix.)

<sup>2</sup>The total cost of materials and value of shipments may include extensive duplication arising from shipments between establishments in the same industry classification. (For a more complete explanation, see appendix.)

TABLE 2 General Statistics for the State, Standard Metropolitan Statistical Areas, and Counties: 1972 and 1967

(See appendix A, Explanation of Terms)

State, standard metropolitan statistical areas, and counties <sup>1</sup>	1972											1967	
	Establishments		All employees		Production workers			Value added by manufacture	Cost of materials <sup>3</sup>	Value of shipments <sup>4</sup>	Capital expenditures, new	All employees	Value added by manufacture
	Total	With 20 employees or more	Number	Payroll	Number	Man-hours	Wages						
	(number)	(number)	(1,000)	(million dollars)	(1,000)	(million)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(1,000)	(million dollars)
WEST VIRGINIA, TOTAL . . . . .	1,110	61	16.0	247.2	11.3	23.0	108.6	83.0	53.9	136.7	215.7	124.0	2 169.5
CITY OF CHARLESTON, WEST VIRGINIA . . . . .	1,110	61	16.0	247.2	11.3	23.0	108.6	83.0	53.9	136.7	215.7	124.0	2 169.5
CHARLESTON . . . . .	279	116	25.1	247.2	10.0	21.0	175.5	53.5	91.7	145.0	20.0	27.4	425.2
HUNTINGTON-ASHLAND . . . . .	172	27	8.1	125.7	5.7	11.2	62.0	23.0	33.6	56.2	8.1	14.8	197.9
PORTION IN OHIO . . . . .	6	2	0.4	1.4	0.2	0.4	0.2	0.1	0.1	0.1	0.1	0.1	1.4
PORTION IN WEST VIRGINIA . . . . .	166	25	7.7	124.3	5.5	10.8	61.8	22.9	33.5	56.1	8.0	14.7	196.5
PORTION IN KENTUCKY . . . . .	6	2	0.4	1.4	0.2	0.4	0.2	0.1	0.1	0.1	0.1	0.1	1.4
MARTINSBURG-MARTINSBURG . . . . .	94	46	12.1	118.2	8.5	17.3	72.7	34.2	203.1	542.5	25.3	28.4	504.2
PORTION IN OHIO . . . . .	12	5	2.9	2.9	2.1	4.5	24.7	703.0	207.1	1 485.5	10.9	10.1	182.5
PORTION IN WEST VIRGINIA . . . . .	82	41	9.2	115.3	6.4	12.8	48.2	261.0	343.6	594.1	14.0	18.3	321.7
STEUBEN-PAINEVILLE . . . . .	184	42	14.8	234.5	11.0	22.0	92.8	442.0	453.6	891.4	22.6	16.3	196.6
PORTION IN OHIO . . . . .	110	40	6.8	111.1	4.1	8.4	33.5	194.3	205.7	398.0	19.7	11.5	150.4
PORTION IN WEST VIRGINIA . . . . .	74	2	8.0	123.4	6.9	13.6	59.3	247.7	247.9	493.4	2.9	4.9	46.2
COUNTIES . . . . .													
BERKELEY . . . . .	32	27	7.1	11.1	2.7	5.3	19.9	83.0	53.9	136.7	3.0	3.7	61.3
BOWLING GREEN . . . . .	12	3	1.8	1.8	0.2	0.2	0.7	4.0	2.0	6.0	0.1	0.1	0.5
BRADY . . . . .	14	3	1.4	1.4	0.2	0.3	0.9	2.2	2.4	4.7	0.1	0.3	1.7
BRIDGEPORT . . . . .	13	2	4.5	47.1	2.8	5.6	25.1	65.4	116.9	181.6	6.1	7.1	11.1
CABOT . . . . .	134	59	12.1	114.2	9.4	18.3	81.1	209.1	319.5	525.3	7.5	7.5	11.1
GRANT . . . . .	25	7	0.5	2.8	0.4	0.9	2.2	9.2	14.0	23.2	0.5	0.4	6.1
SPRINGFIELD . . . . .	33	7	0.8	4.6	0.6	1.2	2.9	10.4	8.9	18.6	1.6	1.0	8.4
HAMPSHIRE . . . . .	14	3	2.9	2.9	0.5	1.0	2.7	4.9	5.6	10.5	0.2	0.4	2.7
HANCOCK . . . . .	38	22	15.3	176.6	13.1	25.7	141.8	376.6	336.7	709.8	60.0	10.1	10.1
HARDY . . . . .	11	3	0.7	3.6	0.7	1.3	2.9	8.9	15.3	24.3	0.3	0.6	4.3
HARRISON . . . . .	70	29	5.6	46.7	4.4	8.3	34.8	96.5	73.7	169.4	7.6	5.7	67.7
JEFFERSON . . . . .	22	10	1.5	8.1	0.9	2.0	5.6	18.3	16.0	33.3	4.8	1.3	37.6
KANSAS . . . . .	180	55	14.5	152.9	10.0	20.3	97.6	575.7	327.8	908.2	28.9	20.0	27.0
KENTON . . . . .	27	7	1.1	6.1	1.0	2.3	5.2	8.6	3.7	12.2	0.2	1.2	5.8
MARIETTA . . . . .	60	25	5.7	47.0	4.8	9.5	38.0	103.4	85.9	189.3	3.3	5.7	80.4
MARTINSBURG . . . . .	17	17	1.1	1.1	0.5	0.5	41.0	140.1	154.8	204.3	16.0	5.7	86.0
MESSENGER . . . . .	23	10	1.5	14.4	1.1	2.2	9.4	39.9	71.6	115.6	2.7	1.4	24.4
MERCER . . . . .	22	22	2.5	11.1	1.7	3.4	11.0	38.8	28.6	67.0	4.0	2.4	22.6
MILFORD . . . . .	25	9	0.5	3.0	0.5	0.8	2.2	4.9	3.7	8.1	4.3	0.4	2.4
MINGO . . . . .	24	3	0.4	2.4	0.3	0.7	1.8	6.9	6.3	13.2	0.2	0.3	3.7
MONROVIA . . . . .	52	11	2.7	17.4	2.2	4.1	12.9	33.7	27.7	60.8	3.1	2.8	20.6
NICHOLAS . . . . .	43	11	1.0	5.7	0.9	1.6	4.2	15.4	9.6	24.8	0.7	1.4	3.8
OHIO . . . . .	76	32	4.0	33.2	2.6	4.9	18.3	54.2	50.9	104.6	3.7	5.8	11.1
POCAHONTAS . . . . .	26	5	0.4	2.3	0.4	0.6	2.0	4.5	8.5	13.1	0.2	0.5	4.8
PRESTON . . . . .	35	3	1.1	6.2	1.0	2.0	5.2	12.6	12.0	25.7	1.8	0.8	7.6
PUTNAM . . . . .	12	3	1.5	13.5	1.3	2.7	11.0	26.5	45.4	70.0	7.1	1.1	1.1
HALF WAY . . . . .	34	21	1.4	10.8	1.1	2.1	6.6	56.8	22.5	78.8	1.3	1.3	9.3
MAHON . . . . .	22	22	1.9	9.1	1.5	2.8	6.9	16.9	15.4	32.0	0.9	1.6	10.8
MITCHELL . . . . .	12	7	0.6	2.6	0.5	1.0	2.5	3.8	1.1	4.9	0.2	0.8	4.1
TAYLOR . . . . .	11	5	0.4	3.0	0.4	0.8	2.6	8.2	9.4	17.6	0.1	0.4	4.3
WALKER . . . . .	12	3	0.6	3.2	0.6	1.2	2.8	5.4	11.4	17.9	0.3	0.8	7.6
WHEELING . . . . .	7	7	1.1	7.3	0.9	1.8	5.5	23.7	13.4	37.0	0.3	0.9	11.4
WYOMING . . . . .	32	14	1.9	11.5	1.4	2.6	7.7	20.6	19.1	39.9	0.7	1.4	11.4
YORK . . . . .	11	4	1.4	1.4	0.3	0.7	1.0	2.7	1.9	4.3	0.3	0.1	0.1
YORK . . . . .	27	6	3.0	3.0	0.5	0.9	3.2	5.7	5.7	11.4	0.4	0.4	3.0

TABLE 3. General Statistics for the State, by Industry Groups and Industries: 1972 and 1967

(See appendix A, Explanation of Terms)

Code	Industry	1972											1967	
		Establishments		All employees		Production workers			Value added by manufacture	Cost of materials <sup>3</sup>	Value of shipments <sup>4</sup>	Capital expenditures, new	All employees	Value added by manufacture
		Total	With 20 employees or more	Number	Payroll	Number	Man-hours	Wages						
		(number)	(number)	(1,000)	(million dollars)	(1,000)	(million)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(1,000)	(million dollars)
10	ALL INDUSTRIES, TOTAL <sup>2</sup> . . . . .	1,110	61	16.0	247.2	11.3	23.0	108.6	83.0	53.9	136.7	215.7	124.0	2 169.5
20	FOOD, DRUG, AND CHEMICALS . . . . .	1,110	61	16.0	247.2	11.3	23.0	108.6	83.0	53.9	136.7	215.7	124.0	2 169.5
30	TEXTILES, APPAREL, AND FUR . . . . .	1,110	61	16.0	247.2	11.3	23.0	108.6	83.0	53.9	136.7	215.7	124.0	2 169.5
40	WOOD, FURNITURE, AND RELATED PRODUCTS . . . . .	1,110	61	16.0	247.2	11.3	23.0	108.6	83.0	53.9	136.7	215.7	124.0	2 169.5
50	STONE, CLAY, AND GLASS . . . . .	1,110	61	16.0	247.2	11.3	23.0	108.6	83.0	53.9	136.7	215.7	124.0	2 169.5
60	METALS AND RELATED PRODUCTS . . . . .	1,110	61	16.0	247.2	11.3	23.0	108.6	83.0	53.9	136.7	215.7	124.0	2 169.5
70	NONMETAL MINERAL PRODUCTS . . . . .	1,110	61	16.0	247.2	11.3	23.0	108.6	83.0	53.9	136.7	215.7	124.0	2 169.5
80	INSTRUMENTS, RELATED INDUSTRIES, AND PRECISION INDUSTRIES . . . . .	1,110	61	16.0	247.2	11.3	23.0	108.6	83.0	53.9	136.7	215.7	124.0	2 169.5
90	TRANSPORTATION EQUIPMENT . . . . .	1,110	61	16.0	247.2	11.3	23.0	108.6	83.0	53.9	136.7	215.7	124.0	2 169.5
99	UNCLASSIFIED INDUSTRIES . . . . .	1,110	61	16.0	247.2	11.3	23.0	108.6	83.0	53.9	136.7	215.7	124.0	2 169.5



TABLE 3. General Statistics for the State, by Industry Groups and Industries: 1972 and 1967—Continued

(See appendix A, Explanation of Terms)

Code	Industry	1972											1967	
		Establishments		All employees		Production workers			Value added by manufacture	Cost of materials <sup>1</sup>	Value of shipments <sup>1</sup>	Capital expenditures, new	All employees	Value added by manufacture
		Total	With 20 employees or more	Number	Payroll	Number	Man-hours	Wages	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(1,000)	(million dollars)
		(number)	(number)	(1,000)	(million dollars)	(1,000)	(million)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(1,000)	(million dollars)
22	TEXTILE MILL PRODUCTS . . . . .	5	4	.9	4.6	.7	1.3	3.4	7.7	8.5	17.0	.2	1.4	9.4
23	TEXTILE, TRIM, AND LACE EXCEPT . . . . .	4	4	5.4	22.9	4.8	8.7	18.4	34.7	9.7	43.1	.7	5.4	28.8
232	WEAVERS AND FINISH FURNISHINGS . . . . .	1	10	1.7	6.2	1.5	2.3	4.8	10.1	6.2	16.0	.1	1.6	9.3
24	LUMBER AND WOOD PRODUCTS . . . . .	46	76	5.4	28.1	4.7	8.4	22.7	51.2	58.2	113.5	.1	1.1	18.1
2411	LOGGING CAMPS, LOGGING CONTRACTORS . . . . .	1	1	.8	3.5	.7	1.2	3.1	7.2	8.3	15.8	.8	.5	3.9
242	SAWMILLS AND PLANING MILLS . . . . .	1	53	3.0	15.9	2.6	5.1	13.5	34.3	1.1	1.1	4.1	4.2	32.3
2421	SAWMILLS AND PLANING MILLS, GENERAL . . . . .	24	43	2.6	13.6	2.3	4.3	11.4	31.0	30.0	60.9	3.9	3.8	29.1
2426	HARDWOOD DIMENSION AND FLOORING . . . . .	1	1	.4	2.1	.4	.7	1.9	3.8	4.2	8.0	.2	(NA)	(NA)
243	PLYWOOD, EXCEPT HARDWOOD VENEER . . . . .	1	1	1.0	5.0	.8	1.4	3.4	8.5	7.3	15.5	.3	(NA)	(NA)
2435	HARDWOOD VENEER AND PLYWOOD . . . . .	1	4	.3	2.2	.3	.5	1.4	3.1	3.3	6.5	(D)	(NA)	(NA)
244	WOOD CONTAINERS . . . . .	1	1	.3	1.6	.3	.5	1.2	2.7	3.2	6.0	.1	(NA)	(NA)
249	MISCELLANEOUS WOOD PRODUCTS . . . . .	32	1	.4	2.2	.3	.6	1.7	3.5	5.5	9.1	.4	(NA)	(NA)
25	FURNITURE AND FIXTURES . . . . .	32	17	1.0	5.7	.8	1.4	3.4	10.6	13.1	24.0	.4	1.1	9.0
251	HOUSEHOLD FURNITURE . . . . .	1	1	.6	2.9	.5	.8	2.0	5.3	6.3	11.6	.2	(NA)	(NA)
254	PARTITIONS AND FIXTURES . . . . .	1	1	.4	2.6	.3	.6	1.7	4.9	6.5	11.7	.3	.2	2.6
26	PAPER AND ALLIED PRODUCTS . . . . .	27	15	1.7	12.1	1.3	2.8	8.7	26.9	25.4	52.2	.8	1.5	17.1
2643	BAGS, EXCEPT TEXTILE BAGS . . . . .	1	3	.3	2.0	.2	.5	1.5	4.7	5.9	10.7	(Z)	88	(D)
27	PRINTING AND PUBLISHING . . . . .	147	35	4.2	31.5	2.6	5.1	18.6	73.5	34.0	107.6	3.2	4.0	67.4
275	COMMERCIAL PRINTING . . . . .	8	13	.9	6.9	.7	1.3	4.7	13.1	8.5	21.7	.6	(NA)	(NA)
2752	COMMERCIAL PRINTING, LITHOGRAPHIC . . . . .	23	1	.5	4.3	.4	.8	3.2	8.3	5.9	14.3	.3	(NA)	(NA)
28	CHEMICALS AND ALLIED PRODUCTS . . . . .	74	74	20.9	234.1	15.1	31.7	156.2	949.4	619.0	1 572.2	72.0	22.5	836.3
281	INDUSTRIAL INORGANIC CHEMICALS . . . . .	1	10	1.5	16.2	1.0	2.0	9.5	56.5	46.3	105.4	5.5	(NA)	(NA)
282	PLASTICS MATERIALS AND SYNTHETICS . . . . .	1	5	7.1	81.2	5.0	10.5	47.7	252.4	205.3	458.0	25.5	(NA)	(NA)
286	INDUSTRIAL ORGANIC CHEMICALS . . . . .	2	17	11.5	128.7	8.6	18.0	93.3	615.0	339.7	959.3	38.3	(NA)	(NA)
2869	INDUSTRIAL ORGANIC CHEMICALS, NEC . . . . .	14	12	1.4	106.3	7.0	14.6	77.1	549.6	268.9	822.7	30.2	(NA)	(NA)
289	MISCELLANEOUS CHEMICAL PRODUCTS . . . . .	1	3	.6	7.0	.4	.9	4.6	20.1	18.7	38.4	2.3	(NA)	(NA)
29	PETROLEUM AND COAL PRODUCTS . . . . .	29	4	.8	7.9	.7	1.5	6.5	25.7	69.6	92.6	(D)	.6	10.9
295	PAVING AND ROOFING MATERIALS . . . . .	21	1	.3	2.5	.2	.5	1.2	5.8	9.3	15.0	(D)	.3	3.7
3079	MISCELLANEOUS PLASTICS PRODUCTS . . . . .	1	7	.5	2.6	.4	.8	2.2	5.7	4.0	9.4	.9	(NA)	(NA)
32	STONE, CLAY, AND GLASS PRODUCTS . . . . .	175	94	20.2	163.7	17.4	33.8	132.1	328.6	182.7	412.7	13.2	20.0	235.3
322	GLASS, GLASSWARE, PRESSED OR BLOWN . . . . .	3	3	10.9	89.4	9.5	18.6	73.2	183.4	77.0	257.5	13.2	10.9	136.2
3221	GLASS CONTAINERS . . . . .	1	6	4.2	39.4	3.7	7.2	33.1	70.0	38.5	105.9	6.9	4.0	51.0
3229	PRESSED AND BLOWN GLASS, NEC . . . . .	2	25	6.7	50.0	5.9	11.4	40.2	113.4	38.5	151.6	6.3	6.9	85.3
3231	PRODUCTS OF PURCHASED GLASS, NEC . . . . .	21	7	.8	5.0	.7	1.3	4.1	11.2	8.8	20.0	.3	.5	6.5
326	POTTERY AND RELATED PRODUCTS . . . . .	14	1	2.9	17.2	2.6	4.8	14.4	21.4	12.1	11.1	.5	3.1	19.4
327	CONCRETE, GYPSUM, PLASTER PRODUCTS . . . . .	75	29	1.5	11.2	1.1	2.2	7.6	24.7	27.1	51.4	7.0	1.2	12.5
3272	CONCRETE PRODUCTS, NEC . . . . .	2	1	.5	3.3	.4	.7	2.5	5.6	4.7	10.1	.4	.4	3.2
3273	READY-MIXED CONCRETE . . . . .	42	15	.7	5.3	.5	.9	3.4	12.7	16.0	28.6	2.0	.5	5.7
329	MISC. NONMETALLIC MINERAL PRODUCTS . . . . .	13	7	1.0	9.3	.8	1.8	7.0	22.3	13.0	34.8	2.6	(NA)	(NA)
33	PRIMARY METAL INDUSTRIES . . . . .	41	74	22.7	278.5	18.7	36.7	217.8	532.2	771.6	1 299.6	57.1	23.3	486.2
331	BLAST FURNACE, BASIC STEEL PROD. . . . .	14	13	15.7	198.0	13.5	27.0	160.0	349.4	413.6	813.5	50.7	15.2	302.8
34	FABRICATED METAL PRODUCTS . . . . .	123	54	7.7	60.1	6.1	12.0	43.8	127.8	149.7	277.6	9.9	(NA)	(NA)
342	CUTLERY, HANDTOOLS AND HARDWARE . . . . .	3	5	1.9	14.8	1.5	2.4	10.8	36.3	22.0	57.3	.9	1.6	29.3
344	FABRICATED STRUCTURAL METAL PROD. . . . .	43	25	2.2	20.1	1.7	3.4	14.2	38.1	75.5	111.9	5.2	1.6	17.1
3441	FABRICATED STRUCTURAL METAL PRODUCTS . . . . .	13	11	.7	6.2	.5	1.0	3.9	12.3	14.6	26.9	2.8	.7	8.7
346	METAL FORGINGS AND STAMPINGS . . . . .	1	3	.4	5.7	.7	1.4	4.4	11.1	8.1	18.9	.3	(NA)	(NA)
35	MACHINERY, EXCEPT ELECTRICAL . . . . .	147	43	4.9	36.9	3.6	6.8	25.1	78.1	72.0	146.3	3.8	4.0	57.3
353	CONSTRUCTION AND RELATED MACHINERY . . . . .	37	23	2.1	16.2	1.5	2.8	10.3	43.5	41.1	82.2	.7	1.8	27.3
3532	MINING MACHINERY . . . . .	24	14	1.9	15.1	1.4	2.6	9.6	41.3	44.3	82.8	1.0	EE	(D)
359	MISC. MACHINERY, EXCEPT ELECTRICAL . . . . .	95	18	1.3	10.8	1.1	2.0	7.7	18.1	9.9	27.0	.9	(NA)	(NA)
36	ELECTRIC, ELECTRONIC EQUIPMENT . . . . .	33	14	5.2	42.5	4.2	8.3	31.3	111.1	73.1	185.0	8.5	(NA)	(NA)
362	ELECTRICAL INDUSTRIAL APPARATUS . . . . .	11	3	1.7	14.7	1.2	2.5	10.0	29.7	23.2	54.4	6.9	1.2	25.2
37	TRANSPORTATION EQUIPMENT . . . . .	31	13	2.5	26.6	2.1	4.3	21.2	57.8	74.7	130.4	1.8	(NA)	(NA)
38	INSTRUMENTS AND RELATED PRODUCTS . . . . .	1	1	.8	6.6	.6	1.2	4.0	49.3	11.5	60.1	.7	(NA)	(NA)
39	MISC. MANUFACTURING INDUSTRIES . . . . .	42	11	1.9	12.3	1.8	3.2	10.7	26.4	22.6	49.3	1.3	1.5	11.3
399	MISCELLANEOUS MANUFACTURES . . . . .	27	4	.4	2.7	.3	.5	1.7	5.8	6.1	12.0	.3	.3	3.8
--	ADMINISTRATIVE AND SERVICE INDUSTRIES . . . . .	74	1	2.7	38.1	-	-	-	-	-	-	-	-	-

Note: The following symbols indicate employment size range for 1967:

A 1 to 9 employees

B 10 to 24 employees

C 25 to 49 employees

D 50 to 99 employees

E 100 to 199 employees

F 200 to 499 employees

G 500 to 999 employees

H 1,000 to 1,999 employees

I 2,000 to 4,999 employees

J 5,000 to 9,999 employees

K 10,000 to 19,999 employees

L 20,000 to 49,999 employees

M 50,000 to 99,999 employees

N 100,000 to 199,999 employees

O 200,000 to 499,999 employees

P 500,000 to 999,999 employees

Q 1,000,000 to 1,999,999 employees

R 2,000,000 to 4,999,999 employees

S 5,000,000 to 9,999,999 employees

T 10,000,000 to 19,999,999 employees

U 20,000,000 to 49,999,999 employees

V 50,000,000 to 99,999,999 employees

W 100,000,000 to 199,999,999 employees

X 200,000,000 to 499,999,999 employees

Y 500,000,000 to 999,999,999 employees

Z 1,000,000,000 to 1,999,999,999 employees

AA 2,000,000,000 to 4,999,999,999 employees

AB 5,000,000,000 to 9,999,999,999 employees

AC 10,000,000,000 to 19,999,999,999 employees

AD 20,000,000,000 to 49,999,999,999 employees

AE 50,000,000,000 to 99,999,999,999 employees

AF 100,000,000,000 to 199,999,999,999 employees

AG 200,000,000,000 to 499,999,999,999 employees

AH 500,000,000,000 to 999,999,999,999 employees

AI 1,000,000,000,000 to 1,999,999,999,999 employees

AJ 2,000,000,000,000 to 4,999,999,999,999 employees

AK 5,000,000,000,000 to 9,999,999,999,999 employees

AL 10,000,000,000,000 to 19,999,999,999,999 employees

AM 20,000,000,000,000 to 49,999,999,999,999 employees

AN 50,000,000,000,000 to 99,999,999,999,999 employees

AO 100,000,000,000,000 to 199,999,999,999,999 employees

AP 200,000,000,000,000 to 499,999,999,999,999 employees

AQ 500,000,000,000,000 to 999,999,999,999,999 employees

AR 1,000,000,000,000,000 to 1,999,999,999,999,999 employees

AS 2,000,000,000,000,000 to 4,999,999,999,999,999 employees

AT 5,000,000,000,000,000 to 9,999,999,999,999,999 employees

AU 10,000,000,000,000,000 to 19,999,999,999,999,999 employees

AV 20,000,000,000,000,000 to 49,999,999,999,999,999 employees

AW 50,000,000,000,000,000 to 99,999,999,999,999,999 employees

AX 100,000,000,000,000,000 to 199,999,999,999,999,999 employees

AY 200,000,000,000,000,000 to 499,999,999,999,999,999 employees

AZ 500,000,000,000,000,000 to 999,999,999,999,999,999 employees

BA 1,000,000,000,000,000,000 to 1,999,999,999,999,999,999 employees

BB 2,000,000,000,000,000,000 to 4,999,999,999,999,999,999 employees

BC 5,000,000,000,000,000,000 to 9,999,999,999,999,999,999 employees

BD 10,000,000,000,000,000,000 to 19,999,999,999,999,999,999 employees

BE 20,000,000,000,000,000,000 to 49,999,999,999,999,999,999 employees

BF 50,000,000,000,000,000,000 to 99,999,999,999,999,999,999 employees

BG 100,000,000,000,000,000,000 to 199,999,999,999,999,999,999 employees

BH 200,000,000,000,000,000,000 to 499,999,999,999,999,999,999 employees

BI 500,000,000,000,000,000,000 to 999,999,999,999,999,999,999 employees

BJ 1,000,000,000,000,000,000,000 to 1,999,99

## Appendix A. SCOPE AND COVERAGE

This report is one of a series presenting preliminary information, by State, from the 1972 Census of Manufactures. The data will be superseded in a final report which, in turn, will be included in *Volume III, Area Statistics, 1972 Census of Manufactures*. The final report will include a comprehensive discussion of the concepts and definitions used in the census.

The census of manufactures covers each manufacturing establishment in the United States with one paid employee or more; manufacturing establishments with no employees are excluded. Firms which operated more than one establishment were required to file a separate report for each location. Companies which engaged in distinctly different lines of activity at one location were asked to submit separate reports if the company records permitted such a separation and the activities were of significant size.

This report includes figures for administrative offices, warehouses, garages, or other auxiliary units which service manufacturing establishments.

In the 1972 census, the approximately 120,000 manufacturing establishments with fewer than 10 employees were excused from filing reports. Under special arrangements which safeguarded the confidentiality of both tax and census records, data on payrolls, sales, and industry classification from the administrative records of the Social Security Administration and the Internal Revenue Service were made available to the Census Bureau for use in the 1972 Economic Censuses (retail and wholesale trade, service industries, construction industries, manufactures, and mineral industries). Estimates for data other than payrolls and sales for these small establishments were constructed from industry averages. The effect on industry aggregates is slight in most industries. For manufacturing as a whole, these small establishments account for less than 3 percent of the payrolls and value added.

Establishments are classified by industry in accordance with industry definitions described in the 1972 edition of the Standard Industrial Classification (SIC) Manual. For 1972, the SIC was significantly revised and the comparability with prior year's data for some industries was significantly affected. The comparability at the 2- and 3-digit SIC levels was less affected. The final volumes of the 1972 Census of Manufactures will contain a table relating aggregates based on the 1972 SIC with aggregates derived from classifying establishments according to the 1967 SIC definitions.

As in earlier censuses, a number of small establishments may have been misclassified as to industry. However, such possible misclassifications have significant effect on *none* of the statistics except the number of establishments. As indicated above, report forms were not mailed to very small establishments (fewer than 10 employees). The industry classifications for these establishments were assigned on the basis of brief descriptions of the general activity of the establishment. Where the description is incomplete or there are relatively fine lines of demarcation among industries or between manufacturing and nonmanufacturing activity, the code assigned to an establishment could differ from that which would have been assigned on the basis of more complete product information. Therefore, the total establishment count for individual industries should be viewed as an approximation rather than a precise measurement. The counts for establishments with 20 employees or more are more reliable than the total number of establishments.

More detailed figures for this State will appear in the final census reports. Final reports will also include a comprehensive discussion of such concepts as "industry" and "establishment," as well as the various statistical items such as "employment," "value of shipments," and "value added." Similar preliminary and final reports will be issued for other States during the coming months. A series of preliminary summary reports showing U.S. totals for each manufacturing industry and for each State are being issued. Final industry reports and final area reports will be published during 1974.

Order forms describing the individual reports and listing their prices may be obtained from any U.S. Department of Commerce district office or from the Publications Distribution Section, Social and Economic Statistics Administration, Washington, D.C. 20233.

The 1972 Census of Manufactures is the 29th census of manufacturing establishments in the United States. For 1972, it was conducted jointly with the censuses of mineral industries, construction industries, retail trade, wholesale trade, and selected services under authority of Title 13 of the United States Code. Title 13 specifies that a census of manufactures be conducted every 5 years and, as amended, to cover years ending in "2" and "7". Title 13 also authorizes an annual sample survey of manufacturing establishments in interim years.



## Appendix B. EXPLANATION OF TERMS

*(For a more complete discussion of these terms and the method of compiling the Census of Manufactures, see the "Introduction" to the 1967 Census of Manufactures, Volume III).*

**All Employees**—All full-time and part-time employees on the payrolls of operating manufacturing establishments for any part of the pay period ending nearest the 12th of the months specified on the report form. Included are all persons on paid sick leave, paid holidays, and paid vacations during these pay periods. Officers of corporations are included as employees; proprietors and partners of unincorporated firms are excluded. The "all employee" number is the average number of production workers for the midmonth payroll period of March, May, August, and November plus the number of nonproduction employees in mid-March.

**Number of Production Workers**—Workers (up through the working foreman level) engaged in fabricating, processing, assembling, inspecting, receiving, packing, warehousing, shipping (but not delivering), and maintenance, repair, janitorial, and watchman services, product development, auxiliary production for plant's own use (e.g., powerplant), recordkeeping, and other closely associated services. Proprietors and partners are excluded.

**Payroll**—This item includes all forms of compensation such as salaries, wages, commissions, dismissal pay, bonuses, vacation and sick leave pay, and compensation in kind, prior to such deductions as employees' Social Security contributions, withholding taxes, group insurance, union dues, and savings bonds. The total includes salaries of officers of these establishments, if a corporation; it excludes payments to the proprietor or partners, if an unincorporated concern. Respondents were told that in reporting they could follow the definition of payrolls used for calculating the Federal withholding tax.

**Man-Hours of Production Workers**—This total relates to production-worker man-hours worked or paid for at the plant including actual overtime hours (not straight-time equivalent hours). It excludes hours paid for vacation, holidays, or sick leave when the employee was not at the plant.

**Cost of Materials**—The term "Cost of Materials" refers to charges actually paid or payable for items consumed or put into production during the year, including freight and other direct charges incurred by the establishment in acquiring these materials. It includes the cost of materials or fuel consumed regardless of

whether these items were purchased by the establishment from other companies, transferred to it from other establishments of the same company, or withdrawn from inventory during the year. The establishment was requested to value materials transferred from other parts of the company at its approximate market value, not at cost of production. The important components of this cost item are (a) all raw materials, semifinished goods, parts, components, containers, scrap, and supplies put into production or used as operating supplies and for repair and maintenance during the year; (b) electric energy purchased; (c) fuels consumed for heat, power, or the generation of electricity; (d) work done by others on materials or parts furnished by manufacturing establishments (contract work); and (e) products bought and resold in the same condition.

**Value of Shipments**—The value of shipments is the received or receivable net selling value, f.o.b. plant (exclusive of freight and taxes), of all products shipped, both primary and secondary, as well as all miscellaneous receipts such as receipts for contract work performed for others, installation and repair, sales of scrap, and sale of products bought and resold without further processing. Included are all items made by the establishment or for it under contract from materials owned by it whether sold, transferred to other plants of the same company, or shipped on consignment. The net selling value of products made in one plant on a contract basis from materials owned by another was reported by the plant providing the materials.

In the case of multiunit companies, the manufacturer was requested to report the value of products transferred to other establishments of the same company at full economic value; i.e., to include not only the direct costs of production but also a reasonable proportion of "all other costs" (including company overhead) and profit.

**Duplication in Cost of Materials and Value of Products**—The aggregate cost of materials and value-of-shipments figures for industry groups and for all manufacturing industries may include large amounts of duplication since the products of some industries are used as materials by others. With some important exceptions, such as motor vehicles and parts, this duplication is not significant within individual industries but arises from the addition of the totals of related industries in successive stages of the production of a finished manufactured product. Examples are the addition of flour mills to bakeries in the food group and the addition of pulp mills to paper mills in the paper and allied products group of industries. Esti-



mates of this duplication indicate that the value of manufactured products exclusive of such duplication—the value of finished manufactures—approximates two-thirds of the total value of products.

Prior to 1962, the Bureau of the Census did not publish figures for cost of materials or value of shipments if they contained significant duplication. Effective with the 1962 annual survey these figures were shown at all industry levels for the United States to meet the requests for their use in studies in which the presence of an indeterminate amount of duplication is not a limiting factor. However, they are appropriately footnoted. Effective with the 1964 annual survey, these industry group totals are also shown at the State, standard metropolitan statistical area, and large-county level.

Even where there is no significant amount of duplication, value-of-shipments figures are deficient as measures of the relative economic importance of individual manufacturing industries or geographic areas because of the wide variation in ratio of materials, labor, and other processing costs to value of shipments among industries.

**Value Added by Manufacture**—This measure of manufacturing activity is derived by subtracting the cost of materials, supplies, containers, fuel, purchased electricity, and cost of resales contract work from the value of shipments for products manufactured plus resales and receipts for services rendered. The result of this calculation is adjusted by the net change in finished goods and work-in-process inventories between the beginning and end of the year. (In the few industries that report value of production rather than value of shipments, only changes in work-in-process inventories are used to adjust value added. In the shipbuilding and repairing industry, no inventory adjustment is made.)

“Value added” avoids the duplication in the value of shipments figure which results from the use of products of some establishments as materials by others. Value added is considered to be the best value measure available for comparing the relative economic importance of manufacturing among industries and geographic areas.

**Expenditures for Plant and Equipment**—Manufacturing establishments in operation and establishments under construction but not yet in operation, were asked to report their expenditures for (a) permanent additions and major alterations to the manufacturing establishment, and (b) new machinery and equipment used for replacement purposes and additions to plant capacity if they are of the type for which depreciation accounts are ordinarily maintained.

These totals exclude expenditures for new facilities and equipment leased from nonmanufacturing concerns; new facilities owned by the Federal Government but operated under contract by private companies; and plant and equipment furnished to the manufacturer by communities and nonprofit organizations. Expenditures for used plant and equipment (although reported in the census), expenditures for land, and cost of maintenance and repairs charged as current operating expense are also omitted from the figures for new capital expenditures.

**Central Administrative Offices and Auxiliary Units**—In the 1972 census as in previous years, respondents were asked to file separate reports for central administrative offices or auxiliary units which were (1) at different locations from the establishments served or, (2) at the same location as one of these establishments but were not operated as an integral part thereof and served two or more establishments. The functions of employees in central administrative offices include general company policy determination, planning and management (that is, company purchasing, accounting, general engineering, direction of company personnel matters, and legal and patent matters). Auxiliaries are storage facilities, garages, repair shops, purchasing offices, sales promotion offices, and research laboratories serving the plants or central management of the company.

**Standard Metropolitan Statistical Areas**—Standard metropolitan statistical areas (SMSA) are integrated economic and social units with a large volume of daily travel and communication between the central city and outlying parts of the area.<sup>1</sup> Each area (except in New England) consists of one whole county or more. An area may contain not only highly industrialized counties but also adjoining counties which, though primarily residential in character, contribute significantly to the industrial counties' labor force and are socially and economically integrated with the central city. These areas are defined by the Federal Committee on Standard Metropolitan Statistical Areas of the Office of Management and Budget for general-purpose use throughout the Federal Government in presenting economic and social data. In the New England States, similar intergration criteria are applied in defining

---

<sup>1</sup> Each standard metropolitan statistical area must include either (1) a city with 50,000 or more inhabitants, or (2) a city having a population of at least 25,000 which (a) with the addition of the population of contiguous places has a population density of at least 1,000 persons per square mile; (b) constitutes, for general economic and social purposes, a single community with a combined population of at least 50,000; and (c) includes a total population of at least 75,000 in the county or counties in which the city and contiguous places are located.



SMSA's on a city and town basis because towns rather than counties are regarded as the significant unit in this region of the country.

The requirement that each SMSA consist of county units (except in New England) sometimes results in the inclusion in an area of considerable amount of territory which would not ordinarily be considered "metropolitan," much less "industrial." It is recognized that metropolitan areas could be more accurately defined in terms of smaller area segments such as minor civil

divisions, but the usefulness of areas so defined would be limited by the fact that many types of economic and social data are available only on a county basis.

Each SMSA is designated by the name of the principal city of the area. In addition to the name of the principal city, the area title may include one or two additional city names.

The data for SMSA's which changed definition since the 1967 census have not been retabulated on the new basis for years prior to 1972.

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**1972 CENSUS OF  
MANUFACTURES**

## AREA SERIES

C72(P)-S50

U. S. DEPARTMENT OF COMMERCE • Social and Economic Statistics Administration • BUREAU OF THE CENSUS

Issued April 1974

**Wisconsin**

Value added by manufacturing in 1972 in the State of Wisconsin amounted to \$9,351 million, a 10-percent increase from 1971 and a 33-percent increase from 1967.

This report presents preliminary results from the 1972 Census of Manufactures for the State, its Standard Metropolitan Statistical Areas, and its counties.

Data are provided for industry groups within the State. Historical data, back to 1958, are included for the State as a whole,

and 1967 figures on employment and value added are provided for the smaller areas.

The figures in this report have been subjected to only preliminary review and must be regarded as approximations of the final census figures. No adjustments have been made in the value figures for changes in price level.

For an explanation of the terms used in the tables, see the appendix at the end of this report.

**TABLE 1. General Statistics for the State: 1972 and Earlier Years**

(See appendix, Explanation of Terms)

Year	Establishments		All employees <sup>1</sup>		Production workers			Value added by manufacture	Cost of materials <sup>2</sup>	Value of shipments <sup>2</sup>	Capital expenditures, new
	Total	With 20 employees or more	Number	Payroll	Number	Man-hours	Wages				
	(number)	(number)	(1,000)	(million dollars)	(1,000)	(millions)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(million dollars)
WISCONSIN											
1972 Census.....	7,769	2,823	494.9	4,675.0	356.6	712.3	3,038.6	9,350.5	11,811.8	20,993.1	529.1
1971 ASM.....	(NA)	(NA)	479.8	4,227.1	342.2	670.2	2,681.7	8,476.4	10,343.0	18,830.0	406.4
1970 ASM.....	(NA)	(NA)	500.6	4,125.0	359.8	710.6	2,628.4	7,874.1	9,615.7	17,425.5	468.1
1969 ASM.....	(NA)	(NA)	523.9	4,101.0	385.7	771.4	2,687.7	8,106.6	9,684.7	17,760.8	473.2
1968 ASM.....	(NA)	(NA)	514.0	3,811.1	375.5	754.6	2,481.5	7,514.7	9,031.7	16,549.3	461.9
1967 Census.....	7,838	2,727	512.2	3,577.8	374.5	754.8	2,332.8	7,014.1	8,511.3	15,452.1	506.6
1966 ASM.....	(NA)	(NA)	515.2	3,493.1	380.3	784.0	2,311.5	6,831.7	8,531.0	15,219.2	476.5
1965 ASM.....	(NA)	(NA)	494.5	3,199.0	365.1	749.6	2,125.1	6,179.0	7,878.1	14,007.5	353.8
1964 ASM.....	(NA)	(NA)	472.9	2,950.3	346.2	707.9	1,936.8	5,717.4	7,107.8	12,732.0	305.8
1963 Census.....	7,937	2,467	461.8	2,781.1	338.5	687.8	1,827.4	4,363.2	(NA)	(NA)	280.7
1962 ASM.....	(NA)	(NA)	469.8	2,715.7	344.3	698.6	1,785.9	5,100.2	(NA)	(NA)	255.3
1961 ASM.....	(NA)	(NA)	454.3	2,501.9	327.8	652.7	1,610.5	4,570.0	(NA)	(NA)	227.9
1960 ASM.....	(NA)	(NA)	467.0	2,557.2	340.1	687.5	1,673.3	4,680.3	(NA)	(NA)	277.1
1959 ASM.....	(NA)	(NA)	467.9	2,493.4	345.5	702.1	1,657.9	4,635.2	(NA)	(NA)	207.0
1958 Census.....	7,890	2,331	439.4	2,208.9	320.0	634.1	1,440.4	3,959.5	(NA)	(NA)	203.7

Note: "ASM" data are based on a representative sample of manufacturing establishments canvassed in the Annual Survey of Manufactures. These estimates may differ from the results of a complete canvass of all manufacturing establishments. The standard errors associated with these estimates are published in the annual survey of manufactures volumes for this period. For comparative purposes, the 1972 ASM estimate for the State of Wisconsin was 497 thousand employees, and \$9,357 million in value added with corresponding standard error of estimate of 1 and 1.

(NA) Not available.

<sup>1</sup>Includes employment and payroll at central administrative offices and auxiliary units. (For a definition of these units, see appendix.)

<sup>2</sup>The total cost of materials and value of shipments may include extensive duplication arising from shipments between establishments in the same industry classification. (For a more complete explanation, see appendix.)

TABLE 2. General Statistics for the State, Standard Metropolitan Statistical Areas, and Counties: 1972 and 1967

(See appendix, Explanation of Terms)

State, standard metropolitan statistical areas, and counties <sup>1</sup>	1972											1967	
	Establishments		All employees <sup>2</sup>		Production workers			Value added by manufacture	Cost of materials <sup>3</sup>	Value of shipments <sup>3</sup>	Capital expenditures, new	All employees	Value added by manufacture
	Total	With 20 employees or more	Number	Payroll	Number	Man-hours	Wages						
	(number)	(number)	(1,000)	(million dollars)	(1,000)	(million)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(1,000)	(million dollars)
WISCONSIN, TOTAL . . . . .	7 769	2 823	494.9	4 675.0	356.6	712.3	3 038.6	9 350.5	11 811.8	20 993.1	529.1	512.2	7 014.1
STANDARD METROPOLITAN STATISTICAL AREAS <sup>4</sup>													
APPLETON-OSHKOSH . . . . .	467	205	37.5	353.8	27.6	59.2	235.0	712.5	921.4	1 626.1	57.8	39.5	522.0
DULUTH-SUPERIOR . . . . .	322	87	10.4	85.0	7.7	15.1	55.7	167.1	251.3	414.2	15.5	12.0	137.6
PORTION IN WISCONSIN . . . . .	42	17	1.6	13.7	1.0	2.2	9.3	36.7	93.1	129.7	6.5	1.4	23.6
PORTION IN MINNESOTA . . . . .	280	70	8.8	71.3	6.7	12.9	46.4	130.4	158.3	284.5	9.0	10.6	114.0
GREEN BAY . . . . .	247	95	17.1	169.9	12.7	26.7	116.5	377.1	823.6	1 187.8	25.7	16.2	283.4
KENOSHA . . . . .	109	40	15.7	178.2	11.7	22.9	123.5	381.7	808.6	1 189.9	9.8	16.3	209.8
LA CROSSE . . . . .	111	33	8.2	68.5	5.4	10.6	37.7	122.3	115.4	238.5	7.4	16.3	196.3
MADISON . . . . .	361	112	16.1	162.8	10.5	20.7	92.6	297.3	497.7	789.4	18.3	16.3	196.3
MILWAUKEE . . . . .	2 594	1 004	195.7	1 983.8	135.3	266.7	1 244.5	3 673.3	3 343.1	6 961.3	193.6	216.5	2 982.5
MINNEAPOLIS-ST. PAUL . . . . .	3 169	1 209	198.3	2 039.3	117.7	230.7	1 210.3	3 790.1	3 973.6	7 663.0	169.6	209.6	2 970.7
PORTION IN WISCONSIN . . . . .	45	16	1.9	14.4	1.4	2.8	9.1	39.6	51.7	90.0	3.0	1.2	16.1
PORTION IN MINNESOTA . . . . .	3 124	1 193	196.4	2 024.9	116.3	227.9	1 201.2	3 750.5	3 921.9	7 573.0	166.6	208.4	2 956.6
RACINE . . . . .	372	144	26.2	256.2	16.4	32.9	148.3	601.3	435.0	1 030.6	25.3	26.2	425.0
COUNTIES													
ADAMS . . . . .	13	4	.3	2.5	.3	.5	1.6	4.4	7.1	11.5	.2	.1	.7
ASHLAND . . . . .	49	11	1.3	8.4	1.2	2.3	7.2	20.2	18.9	39.2	.6	1.4	16.1
BARRON . . . . .	80	25	2.6	16.7	2.2	4.3	12.2	38.3	66.7	105.4	2.1	2.4	21.9
BROWN . . . . .	247	95	17.1	169.9	12.7	26.7	116.5	377.1	823.6	1 187.8	25.7	16.2	283.4
BURNETT . . . . .	22	4	.3	1.8	.3	.6	1.4	3.8	3.3	7.1	.3	.5	4.1
CALUMET . . . . .	58	21	4.7	41.2	3.9	7.8	32.4	90.3	155.6	244.7	3.9	4.3	58.1
CHIPPewa . . . . .	76	29	5.5	54.6	4.3	9.1	41.4	69.7	178.1	246.6	2.5	5.4	92.7
CLARK . . . . .	83	20	1.3	8.5	1.1	2.1	6.6	18.4	62.1	79.9	1.8	1.3	13.1
COLUMBIA . . . . .	72	28	2.9	20.1	2.6	5.1	15.4	58.8	58.0	117.0	1.6	2.7	33.1
CRAWFORD . . . . .	35	11	.6	4.8	.5	.9	3.3	20.5	26.6	48.2	1.2	.5	10.3
DANE . . . . .	366	112	16.1	162.8	10.5	20.7	92.6	297.3	497.7	789.4	18.3	16.3	196.3
DODGE . . . . .	113	52	8.8	67.4	6.7	13.4	50.3	146.1	180.6	324.6	6.6	7.6	106.0
DOOR . . . . .	36	10	1.6	10.3	1.4	2.8	7.8	22.2	24.2	45.7	2.8	1.5	15.6
DOUGLAS . . . . .	42	17	1.6	13.7	1.0	2.2	9.3	36.7	93.1	129.7	6.5	1.4	23.6
EAU CLAIRE . . . . .	58	25	5.4	55.2	4.2	8.2	43.5	147.6	196.4	336.8	4.9	5.8	81.4
FOND DU LAC . . . . .	122	51	10.3	93.1	7.2	14.5	57.6	226.3	343.1	540.7	7.0	10.4	150.7
FOREST . . . . .	30	4	.7	4.2	.6	1.2	3.3	8.7	6.7	15.2	.7	.6	5.0
GRANT . . . . .	71	16	1.2	7.4	1.1	2.0	5.5	16.9	37.3	53.7	2.7	.6	5.7
GREEN . . . . .	63	19	2.1	13.1	1.8	3.5	10.1	40.2	70.9	109.6	1.2	1.3	11.8
GREEN LAKE . . . . .	42	20	2.0	13.2	1.7	3.2	9.8	29.2	23.3	52.5	1.7	2.1	23.4
IOWA . . . . .	31	5	.4	2.6	.3	.6	1.9	7.7	10.0	17.6	.7	.3	3.9
JACKSON . . . . .	17	6	.4	2.7	.4	.8	2.0	5.7	10.9	16.6	.3	.6	5.7
JEFFERSON . . . . .	122	46	8.6	75.9	6.5	13.0	50.6	172.1	209.3	378.4	13.2	8.1	109.9
JUNEAU . . . . .	34	11	1.2	7.8	1.0	2.1	5.9	14.4	27.5	42.0	1.9	1.7	11.9
KENOSHA . . . . .	109	40	15.7	178.2	11.7	22.9	123.5	381.7	808.6	1 189.9	9.8	16.3	209.8
KENAUWEE . . . . .	46	14	1.9	13.8	1.5	3.0	10.3	25.7	31.8	56.4	1.6	2.4	20.1
LA CROSSE . . . . .	111	33	8.2	68.5	5.4	10.6	37.7	122.3	115.4	238.5	7.4	8.3	108.6
LANGLADE . . . . .	40	16	1.2	7.3	1.1	2.2	5.9	15.8	32.7	48.2	2.8	1.3	8.9
LINCOLN . . . . .	65	24	3.2	24.3	2.5	5.3	17.1	45.6	56.0	101.1	4.2	1.8	37.8
MANITOWOC . . . . .	162	68	13.7	113.7	9.7	18.5	73.7	191.2	210.1	396.3	6.9	13.1	147.0
MARATHON . . . . .	173	72	11.7	105.9	8.8	18.5	73.6	196.1	363.2	554.5	13.7	10.2	132.2
MARINETTE . . . . .	90	27	5.1	44.6	4.1	8.5	31.4	99.7	109.4	205.7	6.7	4.9	72.0
MARQUETTE . . . . .	18	7	.6	3.4	.5	1.1	2.5	8.8	31.1	39.7	.6	.4	3.5
MILWAUKEE . . . . .	1 753	707	155.2	1 604.2	105.7	208.1	998.1	2 915.8	2 640.3	5 511.8	150.8	181.1	2 464.6
MONROE . . . . .	42	10	1.3	9.4	1.0	2.0	5.9	19.0	28.6	47.5	2.5	1.5	16.0
OCONTO . . . . .	66	29	2.5	15.9	2.1	4.2	12.7	41.5	65.7	106.1	3.5	1.6	22.0
ONEIDA . . . . .	38	12	1.9	19.2	1.3	2.9	13.1	30.3	42.1	71.4	3.7	1.9	21.4
OUTAGAMIE . . . . .	112	71	14.3	133.1	10.7	24.9	91.8	283.4	390.1	611.2	23.1	13.6	193.0
OZAUKEE . . . . .	142	62	8.4	73.7	6.5	12.1	49.3	153.4	148.6	300.0	6.6	7.4	106.6
PIERCE . . . . .	30	8	.8	6.1	.6	1.2	4.1	27.5	15.4	43.9	1.2	.3	3.0
POLK . . . . .	51	15	1.4	8.2	1.2	2.1	6.0	22.6	27.2	48.2	1.1	1.7	13.8
PORTAGE . . . . .	59	18	2.5	20.6	2.0	4.0	14.8	39.7	42.6	82.6	3.0	2.7	32.2
PRICE . . . . .	46	11	1.6	11.9	1.3	2.6	8.3	25.5	27.5	50.4	2.2	1.2	18.0
RACINE . . . . .	372	144	26.2	256.2	16.4	32.9	148.3	601.3	435.0	1 030.6	25.3	26.2	425.0
RICHLAND . . . . .	30	11	.7	3.8	.6	1.1	2.9	12.1	35.8	46.6	.3	.6	8.0
ROCK . . . . .	159	60	17.8	174.4	12.7	25.3	111.6	424.8	922.3	1 339.7	26.9	19.8	403.7
RUSK . . . . .	33	10	.9	5.0	.7	1.3	3.8	10.8	20.7	31.2	.4	.7	5.2
ST. CROIX . . . . .	45	16	1.9	14.4	1.4	2.8	9.1	39.6	51.7	90.0	3.0	1.2	18.1
SAUK . . . . .	77	25	4.9	38.8	3.7	7.3	27.6	81.7	80.4	160.7	2.8	5.1	57.5
SHAWANO . . . . .	64	19	1.4	9.8	1.1	2.4	7.0	19.6	41.8	61.1	1.9	1.5	14.2
SHERBOGAN . . . . .	209	104	16.7	149.6	12.8	26.4	107.4	284.6	361.4	646.0	12.3	16.3	203.3
TAYLOR . . . . .	40	9	1.2	8.2	1.0	2.2	6.5	15.2	27.8	43.0	.7	.8	7.2
TREMPEALEAU . . . . .	52	13	1.5	9.3	1.3	2.6	7.6	19.3	27.7	48.0	2.8	1.2	10.9
VERNON . . . . .	42	6	.4	2.7	.4	.7	2.1	9.7	18.2	27.9	.4	.3	3.6
VILAS . . . . .	30	8	.6	3.1	.5	.9	2.3	7.4	6.6	14.0	.7	.5	5.4
WALCUTH . . . . .	129	43	5.4	42.9	4.3	8.3	30.1	89.3	98.9	186.7	7.9	5.6	61.2
WASHINGTON . . . . .	27	3	.3	1.8	.3	.5	1.5	3.1	3.9	6.9	.2	.2	1.3
WASHINGTON . . . . .	117	47	9.7	85.3	6.9	13.6	53.8	173.9	184.8	350.2	8.5	8.4	107.7
WAUKESHA . . . . .	582	188	22.4	260.6	16.2	32.9	143.3	430.2	369.4	793.3	27.7	19.6	303.6
WAUPACA . . . . .	37	17	3.0	24.2	2.7	5.4	18.2	51.6	81.8	132.5	3.6	3.5	33.9
WAUSARA . . . . .	18	6	.3	1.8	.3	.4	1.4	3.6	6.4	9.9	.1	.6	5.8
WINNEBAGO . . . . .	231	113	18.5	179.5	13.0	26.5	110.8	338.8	375.7	707.2	30.8	21.6	270.9
WOOD . . . . .	114	46	9.9	105.0	7.2	14.2	63.0	172.6	224.2	394.9	12.3	10.2	123.0

<sup>1</sup> Some counties were withheld from publication in order to (a) avoid disclosing figures for individual companies or (b) permit further checking of the figures for smaller counties. Additional details will appear in the final report for this State.

<sup>2</sup> Includes employment and payroll of central administrative offices and auxiliary units. (For a definition of these units, see appendix.)

<sup>3</sup> The total cost of materials and value of shipments may include extensive duplication arising from shipments between establishments in the same industry classification. (For a more complete explanation, see appendix.)

<sup>4</sup> The standard metropolitan statistical areas in this State are defined as follows:

APPLETON-OSHKOSH SMSA: Counties of Outagamie, Waupaca, and Winnebago Counties, WI.  
 DULUTH-SUPERIOR SMSA: Counties of St. Louis County, MN, and Douglas County, WI.  
 GREEN BAY SMSA: Counties of Waubesa, Waushara, and Winnebago Counties, WI.  
 KENOSHA SMSA: Counties of Kenosha and Racine Counties, WI.  
 LA CROSSE SMSA: Counties of La Crosse and Monroe Counties, WI.

MILWAUKEE SMSA: Counties of Milwaukee, Waukesha, Washington, and Waubesa Counties, WI.  
 MINNEAPOLIS-ST. PAUL SMSA: Counties of Anoka, Carver, Chisago, Dakota, Hennepin, Ramsey, Scott, Washington, and Wright Counties, MN, and St. Croix County, WI.  
 RACINE SMSA: Counties of Racine and Walworth Counties, WI.



TABLE 3. General Statistics for the State, by Industry Groups and Industries: 1972 and 1967

(See appendix, Explanation of Terms)

Code	Industry	1972										1967		
		Establishments		All employees		Production workers			Value added by manufacture	Cost of materials <sup>1</sup>	Value of shipments <sup>1</sup>	Capital expenditures, new	All employees	Value added by manufacture
		Total	With 20 employees or more	Number	Payroll	Number	Man-hours	Wages						
		(number)	(number)	(1,000)	(million dollars)	(1,000)	(million)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(1,000)	(million dollars)
	ALL INDUSTRIES, TOTAL <sup>2</sup> . . . . .	7 769	2 823	494.9	4 675.0	356.6	712.3	3 038.6	9 350.5	11 211.2	20 923.1	529.1	512.2	7 014.1
20	FOOD AND KINDRED PRODUCTS. . . . .	1 288	471	56.5	505.2	41.0	82.5	330.4	1 323.3	3 495.0	4 801.6	97.0	56.7	910.3
201	MEAT PRODUCTS. . . . .	127	48	9.6	101.2	7.7	15.3	78.1	185.6	814.5	996.1	10.1	9.9	108.8
2011	MEATPACKING PLANTS. . . . .	72	20	7.2	83.5	5.8	11.5	65.7	154.1	708.0	858.7	7.7	7.1	83.0
2013	SAUSAGES AND OTHER PREPARED MEATS. . . . .	41	19	1.3	11.7	1.0	1.9	7.7	20.1	50.5	70.4	1.1	1.5	17.5
2016	POULTRY DRESSING PLANTS. . . . .	10	7	1.0	5.3	.9	1.7	4.2	9.9	50.7	60.2	1.1	(NA)	(NA)
202	DAIRY PRODUCTS. . . . .	453	172	15.1	123.9	11.1	22.5	82.4	389.4	1 698.1	2 076.2	22.1	16.3	266.4
2021	CREAMERY BUTTER. . . . .	24	10	.4	4.0	.3	.7	2.5	12.0	113.9	126.3	.9	1.4	20.1
2022	CHEESE, NATURAL AND PROCESSED. . . . .	443	88	8.7	63.4	7.3	14.4	48.8	206.0	999.0	1 177.1	11.1	7.5	93.3
2023	CONDENSED AND EVAPORATED MILK. . . . .	42	25	2.1	19.8	1.6	3.5	14.9	90.5	262.7	348.1	3.6	2.5	74.2
2024	ICE CREAM AND FROZEN DESSERTS. . . . .	26	6	.5	4.6	.3	.4	1.8	7.7	15.8	23.5	.2	.5	7.7
2026	FLUID MILK. . . . .	118	43	3.3	31.9	1.6	3.4	14.5	73.2	306.7	381.2	6.2	4.4	71.1
203	PRESERVED FRUITS AND VEGETABLES. . . . .	130	100	10.4	64.6	9.2	18.5	51.6	186.0	247.3	432.6	18.8	(NA)	(NA)
2033	CANNED FRUITS AND VEGETABLES. . . . .	91	76	7.8	45.5	7.1	14.5	37.7	138.0	177.6	315.5	12.1	6.9	93.4
2038	FROZEN SPECIALTIES. . . . .	19	10	1.5	11.6	1.2	2.2	8.3	32.7	43.6	75.0	1.8	(NA)	(NA)
204	GRAIN MILL PRODUCTS. . . . .	80	26	2.0	18.6	1.3	2.8	10.1	86.7	183.2	269.8	4.1	1.7	51.8
205	BAKERY PRODUCTS. . . . .	65	35	4.6	35.8	2.8	5.6	19.2	72.1	56.9	129.1	2.1	5.2	55.4
2065	CONFECTIONERY PRODUCTS. . . . .	18	9	.7	4.6	.6	1.2	3.1	11.4	13.4	25.0	.3	.6	5.6
208	BEVERAGES. . . . .	133	54	11.2	135.8	6.3	12.4	71.9	318.5	364.0	682.3	36.6	11.8	270.7
2082	MALT BEVERAGES. . . . .	14	11	7.9	105.5	4.7	9.3	58.0	239.5	217.0	455.3	24.1	8.5	215.8
2086	BOTTLED AND CANNED SOFT DRINKS. . . . .	96	33	2.5	20.2	1.0	1.8	6.7	45.6	54.5	99.7	5.2	2.3	29.6
209	MISC. FOODS AND KINDRED PRODUCTS. . . . .	67	20	1.6	11.3	1.2	2.4	7.6	35.4	39.5	74.8	1.6	(NA)	(NA)
2099	FOOD PREPARATIONS, NEC. . . . .	53	18	1.4	10.0	1.0	2.1	6.6	32.6	34.9	67.4	1.5	1.2	16.1
22	TEXTILE MILL PRODUCTS. . . . .	57	33	6.4	45.4	5.2	9.8	30.5	102.2	95.8	194.5	2.5	6.8	79.5
225	KNITTING MILLS. . . . .	21	18	4.8	33.4	3.8	7.1	21.3	71.8	63.2	132.0	1.2	4.2	39.9
2253	KNIT OUTERWEAR MILLS. . . . .	6	5	.9	5.5	.8	1.4	3.4	10.2	6.1	16.2	.2	1.0	7.4
229	MISCELLANEOUS TEXTILE GOODS. . . . .	18	8	.6	5.8	.5	1.1	4.6	18.2	19.2	37.3	.6	CC	(D)
23	APPAREL, OTHER TEXTILE PRODUCTS. . . . .	135	59	7.4	41.3	6.2	11.5	29.6	75.6	67.0	142.1	2.4	8.2	58.6
232	MEN'S AND BOYS' FURNISHINGS. . . . .	12	11	1.7	9.9	1.5	2.7	7.0	18.6	14.8	33.6	.3	1.6	11.9
2329	MEN'S AND BOYS' CLOTHING, NEC. . . . .	8	7	.9	5.4	.8	1.4	3.8	10.0	6.3	16.4	.2	1.0	7.6
233	WOMEN'S, AND MISSES' OUTERWEAR. . . . .	25	16	1.6	8.7	1.4	2.4	5.8	16.9	14.6	31.2	.9	3.2	18.7
236	CHILDREN'S OUTERWEAR. . . . .	5	4	.5	2.9	.5	.9	2.2	4.3	2.1	6.0	.1	.6	2.5
238	MISC. APPAREL AND ACCESSORIES. . . . .	11	4	.4	1.9	.4	.7	1.6	3.4	3.5	6.7	.3	.5	3.2
239	MISC. FABRICATED TEXTILE PRODUCTS. . . . .	66	15	1.9	11.0	1.5	2.7	7.5	18.7	23.2	41.8	.7	1.2	11.5
2399	FABRICATED TEXTILE PRODUCTS, NEC. . . . .	16	7	1.3	7.8	1.1	1.9	5.3	12.9	15.1	28.0	.6	.4	4.2
24	LUMBER AND WOOD PRODUCTS. . . . .	782	164	18.3	125.0	15.7	31.4	97.7	247.5	282.3	528.1	24.4	(NA)	(NA)
2411	LOGGING CAMPS, LOGGING CONTRACTORS. . . . .	276	7	1.2	6.4	1.1	2.0	5.4	15.1	16.4	31.5	2.3	1.3	9.9
242	SAWMILLS AND PLANING MILLS. . . . .	190	26	2.1	13.2	1.9	3.8	11.1	26.8	30.5	58.9	2.0	2.2	17.0
2421	SAWMILLS AND PLANING MILLS, GENERAL. . . . .	167	17	1.4	9.0	1.2	2.4	7.4	20.2	24.5	44.4	1.5	1.5	11.9
2426	HARDWOOD DIMENSION AND FLOORING. . . . .	16	5	.5	2.4	.4	.8	2.1	3.9	3.9	7.9	.3	(NA)	(NA)
2429	SPECIAL PRODUCT SAWMILLS, NEC. . . . .	7	4	.3	1.8	.2	.5	1.5	2.7	2.1	6.6	.2	.4	2.7
243	MILLWORK, PLYWOOD, STRUC. MEMBERS. . . . .	150	58	8.6	60.5	7.4	15.0	47.0	106.6	127.4	231.0	13.1	(NA)	(NA)
2431	MILLWORK. . . . .	70	34	5.9	43.6	5.0	10.2	33.4	69.0	86.5	154.7	2.9	(NA)	(NA)
2434	WOOD KITCHEN CABINETS. . . . .	47	3	.3	2.6	.3	.5	1.8	4.6	3.9	8.5	.1	(NA)	(NA)
244	WOOD CONTAINERS. . . . .	51	28	1.5	8.8	1.3	2.7	6.9	13.7	12.4	26.1	1.5	(NA)	(NA)
2441	NAILED WOOD BOXES AND SHOOK. . . . .	18	6	.4	2.1	.3	.6	1.6	2.9	2.8	5.7	.1	.6	4.5
2448	WOOD PALLETS AND SKIDS. . . . .	21	17	.7	4.1	.6	1.3	3.3	6.4	6.0	12.5	1.2	(NA)	(NA)
2449	WOOD CONTAINERS, NEC. . . . .	12	5	.5	2.7	.4	.8	2.0	4.3	3.6	7.8	.2	(NA)	(NA)
245	WOOD BUILDINGS AND MOBILE HOMES. . . . .	25	22	2.7	21.5	2.3	4.5	16.5	52.4	68.7	120.3	2.3	(NA)	(NA)
2451	MOBILE HOMES. . . . .	14	13	1.5	10.7	1.2	2.2	7.9	28.7	38.0	66.2	1.3	(NA)	(NA)
2452	PREFABRICATED WOOD BUILDINGS. . . . .	11	9	1.2	10.8	1.0	2.4	8.6	23.7	30.8	54.1	1.0	(NA)	(NA)
249	MISCELLANEOUS WOOD PRODUCTS. . . . .	90	23	2.1	14.4	1.7	3.4	10.8	32.9	26.8	60.2	3.2	(NA)	(NA)
2499	WOOD PRODUCTS, NEC. . . . .	83	18	1.7	11.6	1.4	2.8	8.6	25.4	19.0	44.3	2.6	(NA)	(NA)
25	FURNITURE AND FIXTURES. . . . .	151	68	8.7	66.7	6.8	14.1	44.7	125.0	93.1	214.1	6.0	7.0	65.7
251	HOUSEHOLD FURNITURE. . . . .	55	32	4.4	31.8	3.7	7.6	23.2	54.5	42.6	96.1	2.4	(NA)	(NA)
2511	WOOD HOUSEHOLD FURNITURE. . . . .	26	16	2.4	15.2	2.0	4.2	12.1	26.2	20.4	46.0	.9	(NA)	(NA)
2512	UPHOLSTERED HOUSEHOLD FURNITURE. . . . .	11	8	1.5	13.1	1.2	2.4	8.4	21.9	16.1	37.8	.8	(NA)	(NA)
254	PARTITIONS AND FIXTURES. . . . .	54	17	1.0	7.3	.8	1.5	5.4	12.5	11.2	23.0	.5	.6	6.9
2541	WOOD PARTITIONS AND FIXTURES. . . . .	46	13	.8	6.2	.7	1.3	4.6	10.5	9.0	18.9	.5	.5	5.8
259	MISC. FURNITURE AND FIXTURES. . . . .	21	9	1.6	14.1	1.1	2.3	6.6	31.5	17.4	47.3	1.1	.6	5.8
26	PAPER AND ALLIED PRODUCTS. . . . .	200	147	37.4	389.6	29.6	62.8	289.1	823.0	1 107.9	1 924.6	64.7	39.8	663.5
2631	PAPERBOARD MILLS. . . . .	7	7	1.5	16.3	1.3	2.7	12.8	36.2	29.8	65.9	.1	EE	(D)
264	MISC. CONVERTED PAPER PRODUCTS. . . . .	79	47	10.6	105.1	8.4	17.6	76.6	262.5	450.4	706.7	11.5	11.3	211.7
2641	PAPER COATING AND GLAZING. . . . .	13	10	3.0	31.3	2.2	4.8	20.3	69.2	132.8	201.8	3.3	3.5	48.9
2643	BAGS, EXCEPT TEXTILE BAGS. . . . .	17	3	.4	2.8	.3	.6	1.9	6.0	6.2	12.2	.6	.3	2.9
2647	SANITARY PAPER PRODUCTS. . . . .	17	17	5.6	57.2	4.7	9.6	45.6	160.5	278.0	432.1	7.1	5.6	140.0
2649	CONVERTED PAPER PRODUCTS, NEC. . . . .	4	4	.5	4.4	.4	.9	3.1	8.8	17.0	26.1	.1	(NA)	(NA)
265	PAPERBOARD CONTAINERS AND BOXES. . . . .	67	52	6.8	61.0	5.1	10.5	40.6	116.7	140.1	256.3	5.1	7.0	87.2
2651	FOLDING PAPERBOARD BOXES. . . . .	11	9	1.0	8.8	.8	1.6	5.7	17.9	14.4	32.5	.3	.9	4.5
2653	CORRUGATED AND SOLID FIBER BOXES. . . . .	36	28	3.9	35.5	2.8	5.8	22.8	66.0	92.9	158.6	4.1	4.2	49.2

See footnotes at end of table.

TABLE 3. General Statistics for the State, by Industry Groups and Industries: 1972 and 1967—Continued

(See appendix, Explanation of Terms)

Code	Industry	1972											1967	
		Establishments		All employees		Production workers			Value added by manufacture (million dollars)	Cost of materials <sup>1</sup> (million dollars)	Value of shipments <sup>1</sup> (million dollars)	Capital expenditures, new (million dollars)	All employees (1,000)	Value added by manufacture (million dollars)
		Total	With 20 employees or more	Number	Payroll	Number	Man-hours	Wages						
		(number)	(number)	(1,000)	(million dollars)	(1,000)	(million)	(million dollars)						
2654	SANITARY FOOD CONTAINERS . . . . .	5	5	1.1	9.6	.8	1.7	7.0	21.2	20.7	41.5	.5	EE	(D)
27	PRINTING AND PUBLISHING . . . . .	959	202	25.4	224.5	15.9	30.5	140.1	424.8	258.8	679.0	29.6	24.4	292.9
2711	NEWSPAPERS . . . . .	236	54	8.4	64.3	3.4	6.3	29.5	126.6	41.5	168.1	9.1	8.0	84.9
273	BOOKS . . . . .	28	11	1.9	18.9	1.5	3.0	14.4	40.9	32.1	71.5	1.4	3.9	58.1
2731	BOOK PUBLISHING . . . . .	20	5	.4	3.1	.1	.3	1.0	6.4	4.7	10.4	.1	FF	(D)
2732	BOOK PRINTING . . . . .	8	6	1.5	15.8	1.3	2.7	13.4	34.5	27.4	61.1	1.2	EE	(D)
275	COMMERCIAL PRINTING . . . . .	505	95	11.5	109.5	8.7	16.7	77.1	184.1	144.0	325.1	16.6	(NA)	(NA)
2761	MANIFOLD BUSINESS FORMS . . . . .	13	11	1.0	8.6	.7	1.5	5.5	24.6	23.2	48.1	1.2	.5	9.0
278	BLANKBOOKS AND BOOKBINDING . . . . .	20	8	.8	6.3	.7	1.2	4.3	10.8	3.8	14.5	.2	.8	7.7
2782	BLANKBOOKS AND LOOSELEAF BINDERS . . . . .	8	5	.7	5.2	.5	.9	3.4	8.9	3.6	12.4	.1	CC	(D)
279	PRINTING TRADE SERVICES . . . . .	59	10	.7	7.9	.5	1.0	5.7	14.5	3.4	17.7	.4	(NA)	(NA)
2791	TYPESETTING . . . . .	36	3	.3	3.2	.2	.5	2.4	4.6	.5	5.0	.1	.2	2.1
28	CHEMICALS AND ALLIED PRODUCTS . . . . .	227	71	10.6	101.3	6.3	12.5	53.2	382.0	258.5	639.3	12.5	9.5	257.4
282	PLASTICS MATERIALS AND SYNTHETICS . . . . .	10	6	.9	9.7	.6	1.3	5.9	32.1	28.8	60.7	1.3	(NA)	(NA)
283	DRUGS . . . . .	17	11	1.1	8.8	.6	1.0	3.1	29.7	13.8	42.6	1.0	.8	14.1
2851	PAINTS AND ALLIED PRODUCTS . . . . .	31	9	1.0	10.0	.5	.9	3.6	28.2	23.5	51.4	.5	.9	16.3
286	INDUSTRIAL ORGANIC CHEMICALS . . . . .	12	8	.5	4.9	.3	.5	1.8	12.5	15.2	25.7	.6	(NA)	(NA)
287	AGRICULTURAL CHEMICALS . . . . .	30	8	.3	2.7	.2	.5	1.6	6.1	14.8	20.9	.6	(NA)	(NA)
289	MISCELLANEOUS CHEMICAL PRODUCTS . . . . .	59	16	3.3	32.4	2.4	4.9	21.4	66.1	57.2	124.1	2.0	(NA)	(NA)
2893	PRINTING INK . . . . .	12	4	.3	3.1	.2	.4	1.5	7.0	10.0	16.9	.7	(NA)	(NA)
29	PETROLEUM AND COAL PRODUCTS . . . . .	34	9	.5	5.4	.3	.6	2.9	12.1	58.1	69.9	5.1	CC	(D)
30	RUBBER AND MISC. PLASTICS PROD . . . . .	202	106	12.7	107.5	10.4	20.7	78.8	226.0	177.8	395.6	15.8	(NA)	(NA)
3079	MISCELLANEOUS PLASTICS PRODUCTS . . . . .	175	89	8.2	63.2	6.6	13.2	43.2	136.7	111.7	245.2	13.1	(NA)	(NA)
3111	LEATHER TANNING AND FINISHING . . . . .	21	18	3.3	30.9	2.8	5.6	23.0	59.2	100.0	152.6	2.5	4.4	51.4
314	FOOTWEAR, EXCEPT RUBBER . . . . .	47	40	8.4	50.7	7.0	13.4	38.4	98.7	84.7	180.8	1.1	8.7	72.4
3143	MEN'S FOOTWEAR, EXCEPT ATHLETIC . . . . .	27	27	6.8	40.6	5.6	10.8	31.7	84.7	75.6	157.7	.9	(NA)	(NA)
3144	WOMEN'S FOOTWEAR, EXCEPT ATHLETIC . . . . .	10	5	.6	2.9	.6	1.1	2.5	4.4	3.3	7.5	(2)	(NA)	(NA)
3151	LEATHER GLOVES AND MITTENS . . . . .	15	9	.7	3.1	.6	1.1	2.3	4.0	6.1	10.1	(2)	.8	3.7
32	STONE, CLAY, AND GLASS PRODUCTS . . . . .	412	86	7.9	74.0	6.2	13.1	53.0	164.1	141.6	304.2	14.6	8.7	125.6
3231	PRODUCTS OF PURCHASED GLASS . . . . .	17	4	.3	2.0	.2	.4	1.2	5.1	4.9	9.8	.3	.2	1.8
327	CONCRETE, GYPSUM, PLASTER PRODUCTS . . . . .	300	62	4.1	40.9	3.0	6.4	27.0	80.2	73.7	153.6	10.1	4.2	63.2
3271	CONCRETE BLOCK AND BRICK . . . . .	56	7	.5	5.4	.3	.7	2.9	11.9	9.9	21.7	1.4	.6	8.1
3272	CONCRETE PRODUCTS, NEC . . . . .	109	22	1.6	15.4	1.3	2.7	10.7	27.7	20.5	47.8	3.0	1.5	22.2
3273	READY-MIXED CONCRETE . . . . .	130	29	1.8	18.9	1.3	2.7	12.3	37.9	40.7	79.0	5.0	2.0	29.8
3281	CUT STONE AND STONE PRODUCTS . . . . .	21	3	.3	1.7	.2	.4	1.4	3.6	1.4	5.0	.1	.3	3.1
329	MISC. NONMETALLIC MINERAL PRODUCTS . . . . .	53	11	1.7	13.9	1.4	2.8	9.9	39.2	42.5	80.9	3.6	(NA)	(NA)
33	PRIMARY METAL INDUSTRIES . . . . .	220	142	23.9	236.6	19.8	40.9	183.5	406.7	344.7	746.3	23.9	32.6	423.2
331	BLAST FURNACE, BASIC STEEL PROD . . . . .	16	12	2.4	25.2	1.9	4.2	19.3	44.8	63.2	106.1	2.1	2.9	47.0
3315	STEEL WIRE AND RELATED PRODUCTS . . . . .	5	4	.8	7.6	.5	1.2	5.0	15.7	10.4	25.1	.2	CC	(D)
332	IRON AND STEEL FOUNDRIES . . . . .	90	74	13.4	130.9	11.1	22.8	102.1	207.8	110.8	316.9	11.9	15.7	187.8
3321	GRAY IRON FOUNDRIES . . . . .	59	46	7.3	69.0	6.1	12.5	53.8	110.2	71.9	181.5	7.4	8.5	100.5
3322	MALLEABLE IRON FOUNDRIES . . . . .	8	8	2.1	22.6	1.8	3.9	18.4	31.8	11.8	43.1	1.7	1.9	23.6
3325	STEEL FOUNDRIES, NEC . . . . .	18	16	3.7	37.2	3.0	6.0	28.5	61.9	25.5	86.8	2.6	(NA)	(NA)
3341	SECONDARY NONFERROUS METALS . . . . .	9	3	.3	2.6	.2	.4	1.7	7.5	20.8	28.6	(D)	(NA)	(NA)
335	NONFERROUS ROLLING AND DRAWING . . . . .	8	5	2.4	25.4	1.9	4.0	20.1	50.3	81.7	130.0	2.3	1.8	26.6
3361	ALUMINUM FOUNDRIES . . . . .	41	27	3.5	31.7	3.1	6.2	25.6	55.2	43.6	99.5	2.8	2.7	26.5
34	FABRICATED METAL PRODUCTS . . . . .	726	288	52.8	504.2	40.1	78.1	352.7	931.8	884.6	1,800.8	57.1	(NA)	(NA)
341	METAL CANS AND SHIPPING CONTAINERS . . . . .	17	13	3.1	35.2	2.7	5.9	30.0	90.2	157.1	244.7	20.9	(NA)	(NA)
342	CUTLERY, HANDTOOLS AND HARDWARE . . . . .	46	18	5.2	47.9	3.9	7.5	31.8	127.1	73.4	198.6	(D)	4.3	70.6
343	PLUMBING, HEATING, ETC., ELECTRIC . . . . .	21	12	4.2	42.7	3.5	7.3	34.6	85.6	52.6	137.4	2.8	(NA)	(NA)
344	FABRICATED STRUCTURAL METAL PROD . . . . .	226	87	10.2	97.9	7.1	14.3	60.7	176.5	171.8	343.8	8.4	13.0	161.6
3441	FABRICATED STRUCTURAL METAL PRODUCTS . . . . .	44	23	2.1	21.8	1.3	2.8	11.9	36.7	41.3	75.5	1.4	2.5	32.3
3442	METAL DOORS, SASH, AND TRIM . . . . .	29	9	.7	5.3	.5	1.0	3.3	9.3	8.1	17.2	.2	.9	9.2
3443	FABRICATED PLATEWORK (BOILER SHOP) . . . . .	57	33	4.3	41.7	3.2	6.4	28.3	65.0	52.5	116.7	3.9	5.1	52.5
3444	SHEET METALWORK . . . . .	63	16	2.5	24.3	1.7	3.4	14.7	54.8	52.3	106.1	2.7	3.6	55.1
3449	MISCELLANEOUS METAL WORK . . . . .	9	2	.3	2.4	.1	.3	1.2	6.2	14.3	20.5	.1	(NA)	(NA)
3452	BOLTS, NUTS, RIVETS, AND WASHERS . . . . .	13	9	.9	9.1	.7	1.5	6.3	20.9	12.4	33.0	1.3	.9	13.0
346	METAL FORGINGS AND STAMPINGS . . . . .	112	64	15.7	147.9	12.1	21.9	105.0	255.6	234.9	486.3	8.9	(NA)	(NA)
3465	AUTOMOTIVE STAMPINGS . . . . .	5	4	.3	3.3	.3	.6	2.5	8.3	7.1	15.1	.3	(NA)	(NA)
3469	METAL STAMPINGS, NEC . . . . .	99	52	10.1	83.2	7.7	13.8	56.0	153.8	134.2	285.3	6.7	(NA)	(NA)
347	METAL SERVICES, NEC . . . . .	102	24	2.0	13.2	1.7	2.9	9.4	23.3	10.3	33.6	1.5	1.8	18.1
3471	PLATING AND POLISHING . . . . .	22	17	1.2	9.1	1.0	1.9	6.6	17.0	5.9	22.8	1.1	1.3	13.9
3479	METAL COATING AND ALLIED SERVICES . . . . .	20	7	.8	4.1	.7	1.0	2.8	6.3	4.4	10.8	.5	.5	4.3

See footnote at end of table.



TABLE 3. General Statistics for the State, by Industry Groups and Industries: 1972 and 1967—Continued

(See appendix, Explanation of Terms)

Code	Industry	1972											1967	
		Establishments		All employees		Production workers			Value added by manufacture	Cost of materials <sup>1</sup>	Value of shipments <sup>1</sup>	Capital expenditures, new	All employees	Value added by manufacture
		Total	With 20 employees or more	Number	Payroll	Number	Man-hours	Wages						
		(number)	(number)	(1,000)	(million dollars)	(1,000)	(million)	(million dollars)					(million dollars)	(million dollars)
349	MISC. FABRICATED METAL PRODUCTS. .	117	36	6.4	57.5	4.3	8.1	34.3	92.1	67.1	159.5	(D)	(NA)	(NA)
3494	VALVES AND PIPE FITTINGS . . . . .	22	10	4.2	41.6	2.6	4.9	23.1	62.5	42.6	105.8	(D)	1.9	23.6
3496	MISC. FABRICATED WIRE PRODUCTS . . .	20	8	.6	4.6	.5	1.0	3.4	8.1	5.2	13.3	.4	(NA)	(NA)
35	MACHINERY, EXCEPT ELECTRICAL. .	1 261	448	96.5	987.7	68.1	137.9	643.2	2 012.5	1 734.7	3 694.9	81.1	107.5	1 590.2
351	ENGINES AND TURBINES . . . . .	24	22	20.2	209.6	16.4	32.6	164.1	506.1	489.4	977.9	15.5	21.3	288.3
352	FARM AND GARDEN MACHINERY. . . . .	85	45	12.4	122.3	8.7	17.9	83.9	298.3	349.5	639.6	17.0	(NA)	(NA)
353	CONSTRUCTION AND RELATED MACHINERY	97	68	18.8	193.4	13.2	26.8	126.6	358.1	347.8	696.8	14.8	20.3	293.7
3532	MINING MACHINERY . . . . .	6	5	2.8	29.6	1.8	3.4	16.7	41.9	44.3	84.0	1.1	FF	(D)
3535	CONVEYORS AND CONVEYING EQUIPMENT. .	16	9	.6	6.1	.4	.8	3.1	14.0	10.9	24.5	.2	.8	13.2
354	METALWORKING MACHINERY . . . . .	314	74	10.0	114.1	6.8	14.3	69.8	170.2	89.5	258.6	6.6	13.5	205.9
3541	MACHINE TOOLS, METAL CUTTING TYPES .	38	18	3.8	42.8	2.2	4.4	21.6	55.2	29.7	86.2	1.5	7.3	122.0
3544	SPECIAL DIES, TOOLS, JIGS, FIXTURES. .	215	35	3.7	45.9	3.0	6.7	35.8	61.9	24.3	85.5	3.6	4.0	49.0
355	SPECIAL INDUSTRY MACHINERY . . . . .	121	61	9.8	100.3	5.9	12.4	50.1	184.1	139.0	318.6	6.3	10.0	139.9
3551	FOOD PRODUCTS MACHINERY. . . . .	37	18	3.2	29.8	2.3	4.7	19.3	53.0	35.5	84.8	2.1	2.4	35.1
3553	WOODWORKING MACHINERY. . . . .	14	7	.7	7.2	.5	1.1	4.5	11.6	7.8	19.5	.3	.6	8.4
3555	PRINTING TRADES MACHINERY. . . . .	9	3	.3	1.6	.1	.3	1.1	4.0	1.8	5.7	.1	.2	3.2
3559	SPECIAL INDUSTRY MACHINERY, NEC. . .	37	18	1.7	18.7	.9	1.9	8.7	47.1	41.4	88.5	2.3	1.2	14.2
356	GENERAL INDUSTRIAL MACHINERY . . . .	176	66	12.3	133.6	8.1	16.4	80.2	270.1	149.4	412.7	11.8	13.8	222.5
3564	BLOWERS AND FANS . . . . .	11	5	.3	2.7	.2	.4	1.6	7.3	5.1	12.3	.1	.5	7.0
3565	INDUSTRIAL PATTERNS. . . . .	67	4	.6	6.9	.5	.9	5.9	9.6	2.5	11.9	(D)	.7	10.0
3569	GENERAL INDUSTRIAL MACHINERY, NEC. .	33	19	2.3	26.3	1.4	2.9	14.9	45.9	21.6	65.5	(D)	2.9	46.8
357	OFFICE AND COMPUTING MACHINES. . . .	16	7	1.0	8.9	.6	1.1	3.7	19.2	10.2	27.6	.7	2.2	22.2
358	REFRIGERATION, SERVICE MACHINERY . .	62	28	6.7	60.3	4.2	8.1	32.6	116.8	113.2	231.3	4.7	6.5	89.5
3589	SERVICE INDUSTRY MACHINERY, NEC. . .	26	7	.6	5.7	.4	.9	3.6	20.7	16.4	37.1	.5	BB	(D)
359	MISC. MACHINERY, EXCEPT ELECTRICAL	366	77	5.3	45.3	4.3	8.4	32.2	89.5	46.7	131.9	3.8	(NA)	(NA)
36	ELECTRIC, ELECTRONIC EQUIPMENT . . .	252	147	45.5	416.2	31.5	61.1	252.6	795.4	599.5	1 367.4	29.5	(NA)	(NA)
361	ELECTRIC DISTRIBUTING EQUIPMENT. . .	23	13	4.7	46.7	3.4	6.9	29.3	94.8	94.0	188.8	3.4	(NA)	(NA)
362	ELECTRICAL INDUSTRIAL APPARATUS. . .	68	44	19.7	194.8	12.9	25.1	115.8	316.8	190.7	490.9	10.8	22.2	326.6
3621	MOTORS AND GENERATORS. . . . .	33	19	5.1	48.5	3.4	6.4	28.2	81.5	53.9	133.0	4.1	6.6	88.7
3622	INDUSTRIAL CONTROLS. . . . .	24	17	13.0	131.2	8.3	16.2	77.7	208.3	109.5	304.3	5.8	14.2	220.5
3629	ELECTRICAL INDUSTRIAL APPARATUS, NEC	4	3	.3	1.8	.3	.5	1.2	3.0	2.2	5.1	(Z)	BB	(D)
3634	ELECTRIC HOUSEWARES AND FANS . . . .	12	10	4.2	38.2	2.6	4.8	20.0	72.6	67.0	134.5	3.6	EE	(D)
364	ELECT. LIGHTING AND WIRING EQUIP. .	19	11	2.0	17.3	1.4	3.0	10.2	28.8	34.8	64.0	2.2	1.7	16.5
3645	RESIDENTIAL LIGHTING FIXTURES. . . .	4	3	.7	5.6	.5	.9	3.4	7.7	7.8	15.2	(D)	(NA)	(NA)
366	COMMUNICATION EQUIPMENT. . . . .	20	11	1.2	7.5	1.0	1.9	5.5	20.6	13.4	33.9	.3	FF	(D)
367	ELECTRONIC COMPONENTS AND ACCESS. .	44	21	2.9	17.9	2.5	4.8	13.9	37.9	22.8	59.9	.7	3.9	33.0
369	MISC. ELECTRICAL EQUIP., SUPPLIES. .	44	23	6.3	56.3	4.4	8.4	33.5	147.9	88.7	234.3	4.4	FF	(D)
3694	ENGINE ELECTRICAL EQUIPMENT. . . . .	10	8	1.4	11.1	1.0	2.0	7.1	21.4	13.7	34.5	.8	1.5	12.3
3699	ELECTRICAL EQUIPMENT, SUPPLIES, NEC.	20	4	.3	1.9	.3	.5	1.2	4.3	3.0	7.3	.2	(NA)	(NA)
37	TRANSPORTATION EQUIPMENT . . . . .	157	73	34.1	378.4	27.8	56.0	292.3	791.3	1 786.7	2 577.2	44.5	(NA)	(NA)
371	MOTOR VEHICLES AND EQUIPMENT . . . .	72	36	27.6	323.6	22.6	46.1	253.2	680.5	1 674.8	2 355.6	37.9	27.1	492.3
3713	TRUCK AND BUS BODIES . . . . .	19	10	2.7	26.8	1.9	3.9	17.4	39.5	56.4	96.2	1.8	1.9	24.9
373	SHIP, BOAT BUILDING, REPAIRING . . . .	38	11	1.8	12.5	1.6	3.2	9.2	21.1	19.8	40.3	3.1	EE	(D)
3731	SHIP BUILDING AND REPAIRING. . . . .	8	5	1.2	8.2	1.1	2.2	6.2	11.1	8.2	19.2	1.7	1.1	11.2
3732	BOAT BUILDING AND REPAIRING. . . . .	30	6	.6	4.4	.5	1.0	3.0	10.1	11.7	21.0	1.4	BB	(D)
379	MISC. TRANSPORTATION EQUIPMENT . . .	33	16	1.3	10.1	.9	1.8	6.4	23.3	31.1	54.7	.4	(NA)	(NA)
38	INSTRUMENTS AND RELATED PRODUCTS	93	38	7.3	60.1	5.1	9.7	35.3	122.4	73.3	189.8	4.4	(NA)	(NA)
3811	ENGINEERING, SCIENTIFIC INSTRUMENTS.	13	5	2.4	21.3	1.5	3.0	11.3	34.4	25.1	58.1	.8	EE	(D)
382	MEASURING AND CONTROLLING DEVICES. .	30	12	1.9	16.5	1.3	2.4	9.0	38.4	17.4	53.6	1.6	(NA)	(NA)
384	MEDICAL INSTRUMENTS AND SUPPLIES. .	30	13	1.3	10.6	1.0	1.9	6.7	25.2	17.1	40.1	1.0	1.7	22.5
3841	SURGICAL AND MEDICAL INSTRUMENTS . .	9	7	1.0	8.3	.7	1.4	5.3	20.3	13.5	31.6	.9	1.0	15.0
3842	SURGICAL APPLIANCES AND SUPPLIES . .	17	5	.3	2.0	.2	.4	1.3	4.2	3.1	7.2	.1	CC	(D)
3861	PHOTOGRAPHIC EQUIPMENT AND SUPPLIES.	8	5	.4	2.6	.2	.4	1.4	7.1	5.2	11.8	.4	.6	5.7
39	MISC. MANUFACTURING INDUSTRIES . . .	313	95	12.6	97.7	9.1	17.0	59.0	203.2	151.9	351.6	9.8	9.1	107.7
394	TOYS AND SPORTING GOODS. . . . .	89	33	5.6	39.9	4.2	7.5	27.2	74.9	69.7	146.1	4.6	2.4	22.7
3944	GAMES, TOYS, AND CHILDREN'S VEHICLES	16	11	3.4	27.4	2.3	3.9	17.8	42.5	44.7	90.9	1.5	(NA)	(NA)
3949	SPORTING AND ATHLETIC GOODS, NEC . . .	69	22	2.2	12.5	1.9	3.5	9.3	32.0	24.7	54.6	3.1	1.5	13.9
399	MISCELLANEOUS MANUFACTURES . . . . .	177	50	5.2	40.3	3.7	7.0	22.4	90.7	65.0	150.8	4.5	4.2	51.8
3991	BROOMS AND BRUSHES . . . . .	18	9	.8	6.2	.6	1.2	3.9	15.9	11.6	27.0	.9	.6	7.3
3993	SIGNS AND ADVERTISING DISPLAYS . . . .	74	21	2.0	17.0	1.5	2.9	9.7	34.5	21.9	53.7	1.5	1.8	17.6
3999	MANUFACTURING INDUSTRIES, NEC. . . .	74	16	2.1	15.9	1.5	2.7	8.1	38.0	29.0	65.4	2.0	1.6	25.2
--	ADMINISTRATIVE AND AUXILIARY . . . .	189	101	16.8	213.4	-	-	-	-	-	-	-	17.3	-

Note: The following symbols indicate employment size range for 1967

AA less than 250 employees

EE 1,000 to 2,499 employees

BB 250 to 499 employees

FF 2,500 employees and over

CC 500 to 999 employees

- Represents zero. (NA) Not available. Because of a revision to this industry or industry group in the 1972 edition of the SIC manual, 1967 census data are not available on a comparable basis. (D) Withheld to avoid disclosing figures for individual companies. (Z) Less than half of the unit of measurement shown.

<sup>1</sup>The total cost of materials and value of shipments for industry groups shown may include extensive duplication arising from shipments between establishments in the same industry classification. (For a more complete explanation, see appendix.)<sup>2</sup>Includes figures for industry groups which have been withheld from publication in order to (a) avoid disclosing figures for individual companies or (b) permit further checking of figures for smaller industry groups. Additional detail will appear in the final report for this State.

## Appendix A. SCOPE AND COVERAGE

This report is one of a series presenting preliminary information, by State, from the 1972 Census of Manufactures. The data will be superseded in a final report which, in turn, will be included in *Volume III, Area Statistics, 1972 Census of Manufactures*. The final report will include a comprehensive discussion of the concepts and definitions used in the census.

The census of manufactures covers each manufacturing establishment in the United States with one paid employee or more; manufacturing establishments with no employees are excluded. Firms which operated more than one establishment were required to file a separate report for each location. Companies which engaged in distinctly different lines of activity at one location were asked to submit separate reports if the company records permitted such a separation and the activities were of significant size.

This report includes figures for administrative offices, warehouses, garages, or other auxiliary units which service manufacturing establishments.

In the 1972 census, the approximately 120,000 manufacturing establishments with fewer than 10 employees were excused from filing reports. Under special arrangements which safeguarded the confidentiality of both tax and census records, data on payrolls, sales, and industry classification from the administrative records of the Social Security Administration and the Internal Revenue Service were made available to the Census Bureau for use in the 1972 Economic Censuses (retail and wholesale trade, service industries, construction industries, manufactures, and mineral industries). Estimates for data other than payrolls and sales for these small establishments were constructed from industry averages. The effect on industry aggregates is slight in most industries. For manufacturing as a whole, these small establishments account for less than 3 percent of the payrolls and value added.

Establishments are classified by industry in accordance with industry definitions described in the 1972 edition of the Standard Industrial Classification (SIC) Manual. For 1972, the SIC was significantly revised and the comparability with prior year's data for some industries was significantly affected. The comparability at the 2- and 3-digit SIC levels was less affected. The final volumes of the 1972 Census of Manufactures will contain a table relating aggregates based on the 1972 SIC with aggregates derived from classifying establishments according to the 1967 SIC definitions.

As in earlier censuses, a number of small establishments may have been misclassified as to industry. However, such possible misclassifications have significant effect on *none* of the statistics except the number of establishments. As indicated above, report forms were not mailed to very small establishments (fewer than 10 employees). The industry classifications for these establishments were assigned on the basis of brief descriptions of the general activity of the establishment. Where the description is incomplete or there are relatively fine lines of demarcation among industries or between manufacturing and nonmanufacturing activity, the code assigned to an establishment could differ from that which would have been assigned on the basis of more complete product information. Therefore, the total establishment count for individual industries should be viewed as an approximation rather than a precise measurement. The counts for establishments with 20 employees or more are more reliable than the total number of establishments.

More detailed figures for this State will appear in the final census reports. Final reports will also include a comprehensive discussion of such concepts as "industry" and "establishment," as well as the various statistical items such as "employment," "value of shipments," and "value added." Similar preliminary and final reports will be issued for other States during the coming months. A series of preliminary summary reports showing U.S. totals for each manufacturing industry and for each State are being issued. Final industry reports and final area reports will be published during 1974.

Order forms describing the individual reports and listing their prices may be obtained from any U.S. Department of Commerce district office or from the Publications Distribution Section, Social and Economic Statistics Administration, Washington, D.C. 20233.

The 1972 Census of Manufactures is the 29th census of manufacturing establishments in the United States. For 1972, it was conducted jointly with the censuses of mineral industries, construction industries, retail trade, wholesale trade, and selected services under authority of Title 13 of the United States Code. Title 13 specifies that a census of manufactures be conducted every 5 years and, as amended, to cover years ending in "2" and "7". Title 13 also authorizes an annual sample survey of manufacturing establishments in interim years.



## Appendix B. EXPLANATION OF TERMS

*(For a more complete discussion of these terms and the method of compiling the Census of Manufactures, see the "Introduction" to the 1967 Census of Manufactures, Volume III).*

**All Employees**—All full-time and part-time employees on the payrolls of operating manufacturing establishments for any part of the pay period ending nearest the 12th of the months specified on the report form. Included are all persons on paid sick leave, paid holidays, and paid vacations during these pay periods. Officers of corporations are included as employees; proprietors and partners of unincorporated firms are excluded. The "all employee" number is the average number of production workers for the midmonth payroll period of March, May, August, and November plus the number of nonproduction employees in mid-March.

**Number of Production Workers**—Workers (up through the working foreman level) engaged in fabricating, processing, assembling, inspecting, receiving, packing, warehousing, shipping (but not delivering), and maintenance, repair, janitorial, and watchman services, product development, auxiliary production for plant's own use (e.g., powerplant), recordkeeping, and other closely associated services. Proprietors and partners are excluded.

**Payroll**—This item includes all forms of compensation such as salaries, wages, commissions, dismissal pay, bonuses, vacation and sick leave pay, and compensation in kind, prior to such deductions as employees' Social Security contributions, withholding taxes, group insurance, union dues, and savings bonds. The total includes salaries of officers of these establishments, if a corporation; it excludes payments to the proprietor or partners, if an unincorporated concern. Respondents were told that in reporting they could follow the definition of payrolls used for calculating the Federal withholding tax.

**Man-Hours of Production Workers**—This total relates to production-worker man-hours worked or paid for at the plant including actual overtime hours (not straight-time equivalent hours). It excludes hours paid for vacation, holidays, or sick leave when the employee was not at the plant.

**Cost of Materials**—The term "Cost of Materials" refers to charges actually paid or payable for items consumed or put into production during the year, including freight and other direct charges incurred by the establishment in acquiring these materials. It includes the cost of materials or fuel consumed regardless of

whether these items were purchased by the establishment from other companies, transferred to it from other establishments of the same company, or withdrawn from inventory during the year. The establishment was requested to value materials transferred from other parts of the company at its approximate market value, not at cost of production. The important components of this cost item are (a) all raw materials, semifinished goods, parts, components, containers, scrap, and supplies put into production or used as operating supplies and for repair and maintenance during the year; (b) electric energy purchased; (c) fuels consumed for heat, power, or the generation of electricity; (d) work done by others on materials or parts furnished by manufacturing establishments (contract work); and (e) products bought and resold in the same condition.

**Value of Shipments**—The value of shipments is the received or receivable net selling value, f.o.b. plant (exclusive of freight and taxes), of all products shipped, both primary and secondary, as well as all miscellaneous receipts such as receipts for contract work performed for others, installation and repair, sales of scrap, and sale of products bought and resold without further processing. Included are all items made by the establishment or for it under contract from materials owned by it whether sold, transferred to other plants of the same company, or shipped on consignment. The net selling value of products made in one plant on a contract basis from materials owned by another was reported by the plant providing the materials.

In the case of multiunit companies, the manufacturer was requested to report the value of products transferred to other establishments of the same company at full economic value; i.e., to include not only the direct costs of production but also a reasonable proportion of "all other costs" (including company overhead) and profit.

**Duplication in Cost of Materials and Value of Products**—The aggregate cost of materials and value-of-shipments figures for industry groups and for all manufacturing industries may include large amounts of duplication since the products of some industries are used as materials by others. With some important exceptions, such as motor vehicles and parts, this duplication is not significant within individual industries but arises from the addition of the totals of related industries in successive stages of the production of a finished manufactured product. Examples are the addition of flour mills to bakeries in the food group and the addition of pulp mills to paper mills in the paper and allied products group of industries. Esti-



mates of this duplication indicate that the value of manufactured products exclusive of such duplication—the value of finished manufactures—approximates two-thirds of the total value of products.

Prior to 1962, the Bureau of the Census did not publish figures for cost of materials or value of shipments if they contained significant duplication. Effective with the 1962 annual survey these figures were shown at all industry levels for the United States to meet the requests for their use in studies in which the presence of an indeterminate amount of duplication is not a limiting factor. However, they are appropriately footnoted. Effective with the 1964 annual survey, these industry group totals are also shown at the State, standard metropolitan statistical area, and large-county level.

Even where there is no significant amount of duplication, value-of-shipments figures are deficient as measures of the relative economic importance of individual manufacturing industries or geographic areas because of the wide variation in ratio of materials, labor, and other processing costs to value of shipments among industries.

**Value Added by Manufacture**—This measure of manufacturing activity is derived by subtracting the cost of materials, supplies, containers, fuel, purchased electricity, and cost of resales contract work from the value of shipments for products manufactured plus resales and receipts for services rendered. The result of this calculation is adjusted by the net change in finished goods and work-in-process inventories between the beginning and end of the year. (In the few industries that report value of production rather than value of shipments, only changes in work-in-process inventories are used to adjust value added. In the shipbuilding and repairing industry, no inventory adjustment is made.)

“Value added” avoids the duplication in the value of shipments figure which results from the use of products of some establishments as materials by others. Value added is considered to be the best value measure available for comparing the relative economic importance of manufacturing among industries and geographic areas.

**Expenditures for Plant and Equipment**—Manufacturing establishments in operation and establishments under construction but not yet in operation, were asked to report their expenditures for (a) permanent additions and major alterations to the manufacturing establishment, and (b) new machinery and equipment used for replacement purposes and additions to plant capacity if they are of the type for which depreciation accounts are ordinarily maintained.

These totals exclude expenditures for new facilities and equipment leased from nonmanufacturing concerns; new facilities owned by the Federal Government but operated under contract by private companies; and plant and equipment furnished to the manufacturer by communities and nonprofit organizations. Expenditures for used plant and equipment (although reported in the census), expenditures for land, and cost of maintenance and repairs charged as current operating expense are also omitted from the figures for new capital expenditures.

**Central Administrative Offices and Auxiliary Units**—In the 1972 census as in previous years, respondents were asked to file separate reports for central administrative offices or auxiliary units which were (1) at different locations from the establishments served or, (2) at the same location as one of these establishments but were not operated as an integral part thereof and served two or more establishments. The functions of employees in central administrative offices include general company policy determination, planning and management (that is, company purchasing, accounting, general engineering, direction of company personnel matters, and legal and patent matters). Auxiliaries are storage facilities, garages, repair shops, purchasing offices, sales promotion offices, and research laboratories serving the plants or central management of the company.

**Standard Metropolitan Statistical Areas**—Standard metropolitan statistical areas (SMSA) are integrated economic and social units with a large volume of daily travel and communication between the central city and outlying parts of the area.<sup>1</sup> Each area (except in New England) consists of one whole county or more. An area may contain not only highly industrialized counties but also adjoining counties which, though primarily residential in character, contribute significantly to the industrial counties' labor force and are socially and economically integrated with the central city. These areas are defined by the Federal Committee on Standard Metropolitan Statistical Areas of the Office of Management and Budget for general-purpose use throughout the Federal Government in presenting economic and social data. In the New England States, similar intergration criteria are applied in defining

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<sup>1</sup> Each standard metropolitan statistical area must include either (1) a city with 50,000 or more inhabitants, or (2) a city having a population of at least 25,000 which (a) with the addition of the population of contiguous places has a population density of at least 1,000 persons per square mile; (b) constitutes, for general economic and social purposes, a single community with a combined population of at least 50,000; and (c) includes a total population of at least 75,000 in the county or counties in which the city and contiguous places are located.



SMSA's on a city and town basis because towns rather than counties are regarded as the significant unit in this region of the country.

The requirement that each SMSA consist of county units (except in New England) sometimes results in the inclusion in an area of considerable amount of territory which would not ordinarily be considered "metropolitan," much less "industrial." It is recognized that metropolitan areas could be more accurately defined in terms of smaller area segments such as minor civil

divisions, but the usefulness of areas so defined would be limited by the fact that many types of economic and social data are available only on a county basis.

Each SMSA is designated by the name of the principal city of the area. In addition to the name of the principal city, the area title may include one or two additional city names.

The data for SMSA's which changed definition since the 1967 census have not been retabulated on the new basis for years prior to 1972.



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## Wyoming

Value added by manufacturing in 1972 for the State of Wyoming amounted to \$148 million, a 20-percent increase from 1971 and a 72-percent increase from 1967.

This report presents preliminary results from the 1972 Census of Manufactures for the State, its Standard Metropolitan Statistical Areas (SMSA), if any, and its counties.

Data are also provided for industry groups within the State. Historical data, back to 1958, are included for the State as a whole, and 1967 figures on employment and

value added are provided for the smaller areas.

The figures in this report have been subjected to only preliminary review and must be regarded as approximations of the final census figures. No adjustments have been made in the value figures for changes in price level.

For an explanation of the terms used in the tables, see the appendix at the end of this report.

TABLE 1. General Statistics for the State: 1972 and Earlier Years

(See appendix, Explanation of Terms)

Year	Establishments		All employees <sup>1</sup>		Production workers			Value added by manufacture	Cost of materials <sup>2</sup>	Value of shipments <sup>2</sup>	Capital expenditures, new
	Total	With 20 employees or more	Number	Payroll	Number	Man-hours	Wages				
	(number)	(number)	(1,000)	(million dollars)	(1,000)	(millions)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(million dollars)
WYOMING											
1972 Census .....	373	77	7.1	58.4	5.1	10.1	40.4	148.4	315.4	460.0	23.2
1971 ASM .....	NA	NA	6.4	51.1	4.8	9.8	37.8	119.4	244.2	362.6	6.3
1970 ASM .....	NA	NA	6.0	45.7	4.4	8.5	33.8	104.3	223.9	331.5	4.7
1969 ASM .....	NA	NA	5.9	41.5	4.0	8.2	26.1	98.7	222.8	323.7	9.0
1968 ASM .....	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1967 Census .....	331	65	5.9	37.1	4.2	8.1	23.4	86.2	192.2	280.2	7.6
1966 ASM .....	NA	NA	6.7	38.3	4.6	9.3	25.4	93.2	189.9	282.6	16.7
1965 ASM .....	NA	NA	6.7	36.9	4.7	9.4	24.6	95.4	181.4	272.0	9.4
1964 ASM .....	NA	NA	6.3	37.7	4.3	8.9	24.5	80.5	177.1	256.8	14.3
1963 Census .....	342	69	6.8	38.0	4.6	9.1	24.7	81.7	NA	NA	14.0
1962 ASM .....	NA	NA	6.7	36.6	4.8	9.2	22.8	76.5	NA	NA	4.2
1961 ASM .....	NA	NA	7.1	36.9	5.1	9.8	23.8	69.8	NA	NA	10.5
1960 ASM .....	NA	NA	6.7	33.6	5.0	9.8	23.4	72.7	NA	NA	11.4
1959 ASM .....	NA	NA	6.6	33.2	5.0	9.8	23.5	71.6	NA	NA	4.3
1958 Census .....	330	57	6.4	31.6	4.7	9.1	22.2	62.6	NA	NA	7.0

Note: "ASM" data are based on a representative sample of manufacturing establishments canvassed in the Annual Survey of Manufactures. These estimates may differ from the results of a complete canvass of all manufacturing establishments. The standard errors associated with these estimates are published in the annual survey of manufactures volumes for this period.

NA) Not available.

<sup>1</sup>Includes employment and payroll at central administrative offices and auxiliary units. (For a definition of these units see appendix.)

<sup>2</sup>The total cost of materials and value of shipments may include extensive duplication arising from shipments between establishments in the same industry classification. (For a more complete explanation, see appendix.)



TABLE 2. General Statistics for the State, Standard Metropolitan Statistical Areas, and Counties: 1972 and 1967

(See appendix, Explanation of Terms)

State, standard metropolitan statistical areas, and counties <sup>1</sup>	1972											1967	
	Establishments		All employees <sup>2</sup>		Production workers			Value added by manufacture	Cost of materials <sup>3</sup>	Value of shipments <sup>3</sup>	Capital expenditures, new	All employees	Value added by manufacture
	Total	With 20 employees or more	Number	Payroll	Number	Man-hours	Wages						
	(number)	(number)	(1,000)	(million dollars)	(1,000)	(million)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(1,000)	(million dollars)
Wyoming, total.....	373	77	7.1	58.4	5.1	10.1	40.4	148.4	315.4	460.0	23.2	5.9	86.2
STANDARD METROPOLITAN STATISTICAL AREAS (None in this State)													
COUNTIES													
Albany.....	19	9	.5	3.1	.4	.8	2.8	7.5	4.4	12.2	.5	.5	4.8
Big Horn.....	15	4	.3	3.1	.3	.7	2.5	10.2	12.9	23.1	.9	.3	4.8
Fremont.....	35	5	.5	1.0	.3	.7	2.7	7.7	10.5	18.1	.9	.3	4.8
Laramie.....	45	12	1.1	9.1	.8	1.3	6.6	19.6	35.5	54.1	7.1	1.1	9.3
Lincoln.....	19	3	.3	2.1	.2	.5	1.5	4.5	10.2	14.8	.5	.2	1.2
Natrona.....	64	12	1.6	14.4	1.3	2.3	10.0	35.6	115.0	146.6	2.1	1.1	28.1
Park.....	20	6	.7	5.8	.3	.6	2.5	8.1	17.8	25.5	.4	.5	2.5
Sheridan.....	25	5	.4	2.2	.2	.4	1.3	7.1	10.5	17.5	.6	.4	5.6

<sup>1</sup>Some counties were withheld from publication in order to (a) avoid disclosing figures for individual companies or (b) permit further checking of the figures for smaller counties. Additional detail will appear in the final report for this State.

<sup>2</sup>Includes employment and payroll at central administrative offices and auxiliary units. (For a definition of these units, see appendix.)

<sup>3</sup>The total cost of materials and value of shipments may include extensive duplication arising from shipments between establishments in the same industry classification. (For a more complete explanation, see appendix.)

TABLE 3. General Statistics for the State, by Industry Groups and Industries: 1972 and 1967

(See appendix, Explanation of Terms)

Code	Industry	1972											1967	
		Establishments		All employees		Production workers			Value added by manufacture	Cost of materials <sup>1</sup>	Value of shipments <sup>1</sup>	Capital expenditures, new	All employees	Value added by manufacture
		Total	With 20 employees or more	Number	Payroll	Number	Man-hours	Wages						
		(number)	(number)	(1,000)	(million dollars)	(1,000)	(million)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(1,000)	(million dollars)
	All industries, total <sup>2</sup> .....	373	77	7.1	58.4	5.1	10.1	40.4	148.4	315.4	460.0	23.2	5.9	86.2
20	Food and kindred products.....	62	11	1.1	7.8	.7	1.7	5.4	19.4	44.0	64.1	1.6	1.3	14.1
202	Dairy products.....	8	5	.3	1.9	.1	.3	.8	3.8	11.8	15.6	.2	(D)	(D)
24	Lumber and wood products:													
242	Sawmills and planing mills.....	27	10	.7	5.1	.6	1.2	4.2	11.4	17.2	28.7	1.4	.6	6.6
2421	Sawmills and planing mills, general	27	10	.7	5.1	.6	1.2	4.2	11.4	17.2	28.7	1.4	.6	6.6
27	Printing and publishing.....	62	12	.8	5.4	.4	.8	3.0	10.5	3.0	13.4	1.0	.7	6.3
2711	Newspapers.....	36	8	.6	3.8	.3	.5	2.0	8.4	1.4	9.8	.9	.5	5.1
29	Petroleum and coal products....	15	7	1.3	15.4	1.1	2.1	11.3	53.1	206.2	257.4	8.7	1.8	36.9
2911	Petroleum refining.....	10	7	1.3	14.1	1.0	2.1	11.1	51.9	204.4	254.4	8.7	(D)	(D)
32	Stone, clay, and glass.....	46	14	.8	7.6	.7	1.5	6.3	19.9	12.3	32.0	1.3	.4	6.5
--	Administrative offices and auxiliary units.....	7	3	.3	3.0	-	-	-	-	-	-	-	NA	(NA)

- Represents zero. (NA) Not available. (D) Withheld to avoid disclosing figures for individual companies.

<sup>1</sup>The total cost of materials and value of shipments for industry groups shown may include extensive duplication arising from shipments between establishments in the same industry classification. (For a more complete explanation, see appendix.)

<sup>2</sup>Includes figures for industry groups which have been withheld from publication in order to (a) avoid disclosing figures for individual companies or (b) permit further checking of figures for smaller industry groups. Additional detail will appear in the final report for the State.

## Appendix A. SCOPE AND COVERAGE

This report is one of a series presenting preliminary information, by State, from the 1972 Census of Manufactures. The data will be superseded in a final report which, in turn, will be included in *Volume III, Area Statistics, 1972 Census of Manufactures*. The final report will include a comprehensive discussion of the concepts and definitions used in the census.

The census of manufactures covers each manufacturing establishment in the United States with one paid employee or more; manufacturing establishments with no employees are excluded. Firms which operated more than one establishment were required to file a separate report for each location. Companies which engaged in distinctly different lines of activity at one location were asked to submit separate reports if the company records permitted such a separation and the activities were of significant size.

This report includes figures for administrative offices, warehouses, garages, or other auxiliary units which service manufacturing establishments.

In the 1972 census, the approximately 120,000 manufacturing establishments with fewer than 10 employees were excused from filing reports. Under special arrangements which safeguarded the confidentiality of both tax and census records, data on payrolls, sales, and industry classification from the administrative records of the Social Security Administration and the Internal Revenue Service were made available to the Census Bureau for use in the 1972 Economic Censuses (retail and wholesale trade, service industries, construction industries, manufactures, and mineral industries). Estimates for data other than payrolls and sales for these small establishments were constructed from industry averages. The effect on industry aggregates is slight in most industries. For manufacturing as a whole, these small establishments account for less than 3 percent of the payrolls and value added.

Establishments are classified by industry in accordance with industry definitions described in the 1972 edition of the Standard Industrial Classification (SIC) Manual. For 1972, the SIC was significantly revised and the comparability with prior year's data for some industries was significantly affected. The comparability at the 2- and 3-digit SIC levels was less affected. The final volumes of the 1972 Census of Manufactures will contain a table relating aggregates based on the 1972 SIC with aggregates derived from classifying establishments according to the 1967 SIC definitions.

As in earlier censuses, a number of small establishments may have been misclassified as to industry. However, such possible misclassifications have significant effect on *none* of the statistics except the number of establishments. As indicated above, report forms were not mailed to very small establishments (fewer than 10 employees). The industry classifications for these establishments were assigned on the basis of brief descriptions of the general activity of the establishment. Where the description is incomplete or there are relatively fine lines of demarcation among industries or between manufacturing and nonmanufacturing activity, the code assigned to an establishment could differ from that which would have been assigned on the basis of more complete product information. Therefore, the total establishment count for individual industries should be viewed as an approximation rather than a precise measurement. The counts for establishments with 20 employees or more are more reliable than the total number of establishments.

More detailed figures for this State will appear in the final census reports. Final reports will also include a comprehensive discussion of such concepts as "industry" and "establishment," as well as the various statistical items such as "employment," "value of shipments," and "value added." Similar preliminary and final reports will be issued for other States during the coming months. A series of preliminary summary reports showing U.S. totals for each manufacturing industry and for each State are being issued. Final industry reports and final area reports will be published during 1974.

Order forms describing the individual reports and listing their prices may be obtained from any U.S. Department of Commerce district office or from the Publications Distribution Section, Social and Economic Statistics Administration, Washington, D.C. 20233.

The 1972 Census of Manufactures is the 29th census of manufacturing establishments in the United States. For 1972, it was conducted jointly with the censuses of mineral industries, construction industries, retail trade, wholesale trade, and selected services under authority of Title 13 of the United States Code. Title 13 specifies that a census of manufactures be conducted every 5 years and, as amended, to cover years ending in "2" and "7". Title 13 also authorizes an annual sample survey of manufacturing establishments in interim years.



## Appendix B. EXPLANATION OF TERMS

*(For a more complete discussion of these terms and the method of compiling the Census of Manufactures, see the "Introduction" to the 1967 Census of Manufactures, Volume III).*

**All Employees**—All full-time and part-time employees on the payrolls of operating manufacturing establishments for any part of the pay period ending nearest the 12th of the months specified on the report form. Included are all persons on paid sick leave, paid holidays, and paid vacations during these pay periods. Officers of corporations are included as employees; proprietors and partners of unincorporated firms are excluded. The "all employee" number is the average number of production workers for the midmonth payroll period of March, May, August, and November plus the number of nonproduction employees in mid-March.

**Number of Production Workers**—Workers (up through the working foreman level) engaged in fabricating, processing, assembling, inspecting, receiving, packing, warehousing, shipping (but not delivering), and maintenance, repair, janitorial, and watchman services, product development, auxiliary production for plant's own use (e.g., powerplant), recordkeeping, and other closely associated services. Proprietors and partners are excluded.

**Payroll**—This item includes all forms of compensation such as salaries, wages, commissions, dismissal pay, bonuses, vacation and sick leave pay, and compensation in kind, prior to such deductions as employees' Social Security contributions, withholding taxes, group insurance, union dues, and savings bonds. The total includes salaries of officers of these establishments, if a corporation; it excludes payments to the proprietor or partners, if an unincorporated concern. Respondents were told that in reporting they could follow the definition of payrolls used for calculating the Federal withholding tax.

**Man-Hours of Production Workers**—This total relates to production-worker man-hours worked or paid for at the plant including actual overtime hours (not straight-time equivalent hours). It excludes hours paid for vacation, holidays, or sick leave when the employee was not at the plant.

**Cost of Materials**—The term "Cost of Materials" refers to charges actually paid or payable for items consumed or put into production during the year, including freight and other direct charges incurred by the establishment in acquiring these materials. It includes the cost of materials or fuel consumed regardless of

whether these items were purchased by the establishment from other companies, transferred to it from other establishments of the same company, or withdrawn from inventory during the year. The establishment was requested to value materials transferred from other parts of the company at its approximate market value, not at cost of production. The important components of this cost item are (a) all raw materials, semifinished goods, parts, components, containers, scrap, and supplies put into production or used as operating supplies and for repair and maintenance during the year; (b) electric energy purchased; (c) fuels consumed for heat, power, or the generation of electricity; (d) work done by others on materials or parts furnished by manufacturing establishments (contract work); and (e) products bought and resold in the same condition.

**Value of Shipments**—The value of shipments is the received or receivable net selling value, f.o.b. plant (exclusive of freight and taxes), of all products shipped, both primary and secondary, as well as all miscellaneous receipts such as receipts for contract work performed for others, installation and repair, sales of scrap, and sale of products bought and resold without further processing. Included are all items made by the establishment or for it under contract from materials owned by it whether sold, transferred to other plants of the same company, or shipped on consignment. The net selling value of products made in one plant on a contract basis from materials owned by another was reported by the plant providing the materials.

In the case of multiunit companies, the manufacturer was requested to report the value of products transferred to other establishments of the same company at full economic value; i.e., to include not only the direct costs of production but also a reasonable proportion of "all other costs" (including company overhead) and profit.

**Duplication in Cost of Materials and Value of Products**—The aggregate cost of materials and value-of-shipments figures for industry groups and for all manufacturing industries may include large amounts of duplication since the products of some industries are used as materials by others. With some important exceptions, such as motor vehicles and parts, this duplication is not significant within individual industries but arises from the addition of the totals of related industries in successive stages of the production of a finished manufactured product. Examples are the addition of flour mills to bakeries in the food group and the addition of pulp mills to paper mills in the paper and allied products group of industries. Esti-



mates of this duplication indicate that the value of manufactured products exclusive of such duplication—the value of finished manufactures—approximates two-thirds of the total value of products.

Prior to 1962, the Bureau of the Census did not publish figures for cost of materials or value of shipments if they contained significant duplication. Effective with the 1962 annual survey these figures were shown at all industry levels for the United States to meet the requests for their use in studies in which the presence of an indeterminate amount of duplication is not a limiting factor. However, they are appropriately footnoted. Effective with the 1964 annual survey, these industry group totals are also shown at the State, standard metropolitan statistical area, and large-county level.

Even where there is no significant amount of duplication, value-of-shipments figures are deficient as measures of the relative economic importance of individual manufacturing industries or geographic areas because of the wide variation in ratio of materials, labor, and other processing costs to value of shipments among industries.

**Value Added by Manufacture**—This measure of manufacturing activity is derived by subtracting the cost of materials, supplies, containers, fuel, purchased electricity, and cost of resales contract work from the value of shipments for products manufactured plus resales and receipts for services rendered. The result of this calculation is adjusted by the net change in finished goods and work-in-process inventories between the beginning and end of the year. (In the few industries that report value of production rather than value of shipments, only changes in work-in-process inventories are used to adjust value added. In the shipbuilding and repairing industry, no inventory adjustment is made.)

“Value added” avoids the duplication in the value of shipments figure which results from the use of products of some establishments as materials by others. Value added is considered to be the best value measure available for comparing the relative economic importance of manufacturing among industries and geographic areas.

**Expenditures for Plant and Equipment**—Manufacturing establishments in operation and establishments under construction but not yet in operation, were asked to report their expenditures for (a) permanent additions and major alterations to the manufacturing establishment, and (b) new machinery and equipment used for replacement purposes and additions to plant capacity if they are of the type for which depreciation accounts are ordinarily maintained.

These totals exclude expenditures for new facilities and equipment leased from nonmanufacturing concerns; new facilities owned by the Federal Government but operated under contract by private companies; and plant and equipment furnished to the manufacturer by communities and nonprofit organizations. Expenditures for used plant and equipment (although reported in the census), expenditures for land, and cost of maintenance and repairs charged as current operating expense are also omitted from the figures for new capital expenditures.

**Central Administrative Offices and Auxiliary Units**—In the 1972 census as in previous years, respondents were asked to file separate reports for central administrative offices or auxiliary units which were (1) at different locations from the establishments served or, (2) at the same location as one of these establishments but were not operated as an integral part thereof and served two or more establishments. The functions of employees in central administrative offices include general company policy determination, planning and management (that is, company purchasing, accounting, general engineering, direction of company personnel matters, and legal and patent matters). Auxiliaries are storage facilities, garages, repair shops, purchasing offices, sales promotion offices, and research laboratories serving the plants or central management of the company.

**Standard Metropolitan Statistical Areas**—Standard metropolitan statistical areas (SMSA) are integrated economic and social units with a large volume of daily travel and communication between the central city and outlying parts of the area.<sup>1</sup> Each area (except in New England) consists of one whole county or more. An area may contain not only highly industrialized counties but also adjoining counties which, though primarily residential in character, contribute significantly to the industrial counties' labor force and are socially and economically integrated with the central city. These areas are defined by the Federal Committee on Standard Metropolitan Statistical Areas of the Office of Management and Budget for general-purpose use throughout the Federal Government in presenting economic and social data. In the New England States, similar intergration criteria are applied in defining

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<sup>1</sup> Each standard metropolitan statistical area must include either (1) a city with 50,000 or more inhabitants, or (2) a city having a population of at least 25,000 which (a) with the addition of the population of contiguous places has a population density of at least 1,000 persons per square mile; (b) constitutes, for general economic and social purposes, a single community with a combined population of at least 50,000; and (c) includes a total population of at least 75,000 in the county or counties in which the city and contiguous places are located.



SMSA's on a city and town basis because towns rather than counties are regarded as the significant unit in this region of the country.

The requirement that each SMSA consist of county units (except in New England) sometimes results in the inclusion in an area of considerable amount of territory which would not ordinarily be considered "metropolitan," much less "industrial." It is recognized that metropolitan areas could be more accurately defined in terms of smaller area segments such as minor civil

divisions, but the usefulness of areas so defined would be limited by the fact that many types of economic and social data are available only on a county basis.

Each SMSA is designated by the name of the principal city of the area. In addition to the name of the principal city, the area title may include one or two additional city names.

The data for SMSA's which changed definition since the 1967 census have not been retabulated on the new basis for years prior to 1972.

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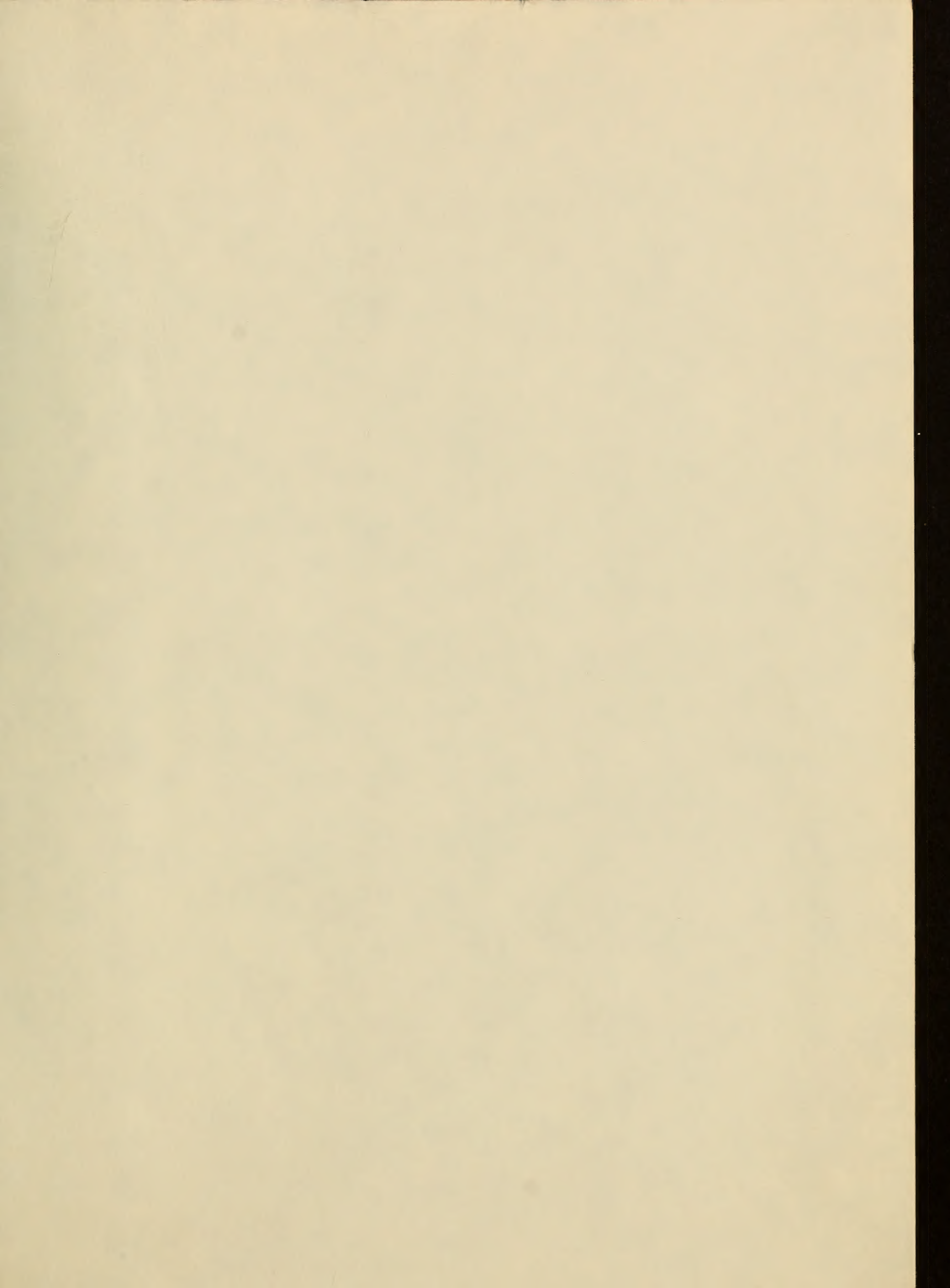












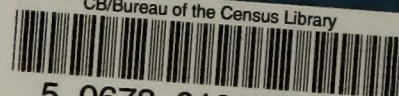








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